

Contents

4	WIRTGEN GROUP
	Added value for our customers
	Product Brands
6	WIRTGEN
2	VÖGELE
6	HAMM
20	KLEEMANN
24	BENNINGHOVEN
27	CIBER
28	WIRTGEN GROUP Factories
	State-of-the-art production
80	Global Network
	Close to our Customers
32	Sustainability
	End-to-end sustainable management
34	Digital Transformation
	Do more with less
88	Customer Services
	Bespoke solutions

WIRTGEN GROUP Culture

Our commitments

42

Intro



Welcome to the world of the WIRTGEN GROUP. In the long history of our company, we have established ourselves as a leading global supplier of construction equipment, plants, and technologies for road construction and minerals processing as well as a driver of innovation in our industry. We invite you to discover more about us, our products, and the services we provide.

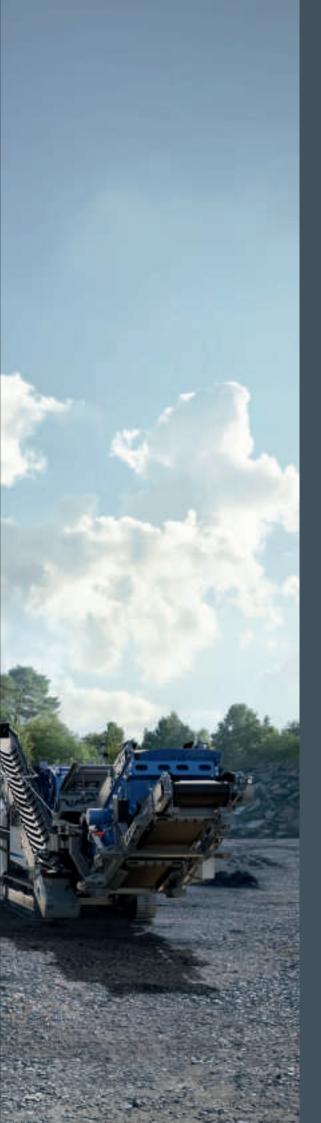
Our customers face numerous challenges that decisively influence current and future investment decisions: extended reporting obligations, stricter emissions requirements for project tenders, stricter occupational safety regulations, a growing shortage of skilled workers, and uncertain political and economic framework conditions.

In this complex situation, the WIRTGEN GROUP stands firmly at your side as a reliable partner. The machines and plants we produce today are designed to meet the requirements of the future with state-of-the-art technology and high quality standards. This is complemented by a broad spectrum of services such as product training for maximum efficiency on construction sites, global service teams, and bespoke financing solutions. This is how we create ideal conditions for the sustainable success of our customers around the globe. SMARTER. SAFER. MORE SUSTAINABLE.

Dr. Volker Knickel
CEO WIRTGEN GROUP

Added value for our customers





As a technology driver in the construction industry, the WIRTGEN GROUP is a strong partner for the road construction and materials processing sectors. With a comprehensive range of machines and technology solutions for our customers' production systems, we provide end-to-end coverage of the road construction process chain and enable them to achieve top performance on their construction projects around the globe.

The WIRTGEN GROUP is a strong part of John Deere. Our six specialized product brands - WIRTGEN, VÖGELE, HAMM, KLEEMANN, BENNINGHOVEN and CIBER - combine decades of experience, expertise, and excellence. Their product ranges complement one another wonderfully. With our combined expertise, we serve the individual needs and requirements of our customers.

Our portfolio is complemented by earth moving and road construction equipment from John Deere as well as joint digital solutions. Thanks to the continuous development of our products, our customers always benefit from state-of-the-art technologies and our comprehensive industry expertise, which enable them to complete their construction projects reliably and profitably.



> www.wirtgen-group.com

HIGH-TECH

FOR



RESULTS

WIRTGEN



WIRTGEN GmbH offers a seamless portfolio of mobile machines and premium services for all aspects of road construction and material extraction by open-cast mining.

Worldwide Leadership with a Multifaceted Product Portfolio

WIRTGEN stands for powerful, innovative solutions for road construction and surface mining. In addition, the company offers a comprehensive range of groundbreaking products and key technologies. With these, WIRTGEN provides numerous efficient solutions for applications such as cold milling, cold recycling, soil stabilization, concrete paving, routing, and the extraction of primary resources.

The company was founded in 1961, and its story of success began with the appearance of the first road milling machine only a few years later. Since then, the WIRTGEN brand has stood for the continuous development of machines and technologies that assure its customers' only the best results. The combination of in-depth knowledge and extensive experience in our key technologies such as cutting, leveling, and control system technologies, is crucial for ensuring that our company is regarded as a reliable partner.

Shaping the Future

With smart digital innovations such as the WIRTGEN GROUP Performance Tracker WPT for real time monitoring of machine performance or the MILL ASSIST machine control system for improving machine performance while reducing emissions, the company is continuously advancing efficiency and sustainability. This remains true to our mission of always offering technologies and solutions that make the difference - for all current and future challenges.

With the aid of WIRTGEN machines and technologies, customers around the globe have the ability to shape the world of tomorrow and simultaneously conserve valuable resources.





Large milling machines for the milling of large areas to depths of up to 35 cm in a single pass.



Compact milling machines for efficient milling operations and high daily production rates.



Milling around obstacles such as manhole covers with the highly maneuverable small milling machines.

Cold Milling Machines

Cold milling machines are used to remove damaged asphalt and concrete pavements either layer by layer or for full-depth pavement reclamation. The reclaimed milled material (RAP) is a high-quality construction material and can be fully reused. As the market leader, WIRTGEN offers its customers the most comprehensive range of cold milling machines in the industry. Working widths from 35 cm to 4.40 m and working depths of up to 35 cm are possible in a single pass. In addition, a large number of different milling drums ensure that the machines have the required flexibility for different applications.

Small Milling Machines have a wheeled chassis and a rotating milling drum mounted at the rear. The compact rear loaders are highly maneuverable and feature a right rear wheel that can be swiveled inwards to enable milling to the edges of obstacles. The broad spectrum of applications ranges from partial pavement rehabilitation and milling tie-ins to the rehabilitation of floors in industrial buildings.

Compact Milling Machines combine the advantages of the small and large milling machine classes and offer outstanding flexibility for a wide range of applications. The maneuverable front loaders are easy to transport and are ideal for use on construction sites with restricted space. These powerful machines can not only cost-effectively mill off entire asphalt pavements, their daily tasks also include layer-by-layer removal of road pavement structures and fine milling.

Large Milling Machines for high daily productivity, have a milling drum positioned centrally beneath the machine and a two-part front-loading system. Trucks can be loaded quickly and flexibly with the slewing and height-adjustable discharge conveyor. The range of applications extends from broad-scale complete removal to a depth of 35 cm in a single pass, to the rehabilitation of concrete pavements and airport runways, as well as fine milling to improve surface grip.





The mobile cold recycling mixing plant KMA 240 (i) with an enormous mixing capacity of over 240 t/h.

Cold Recyclers and Soil Stabilizers

Our cold recyclers can efficiently complete both in-plant and in-situ tasks. In soil stabilization, the powerful milling and mixing rotor mixes pre-spread binding agents such as lime or cement into the existing soil with insufficient bearing capacity, and transforms it in-situ into a high-quality, homogeneous construction material. In-situ recycling pays off for users due to the reduced number of truck movements, shorter construction times, conserved resources, and lower CO₂ emissions.

In cold recycling, asphalt pavements are processed in-situ for further use. In this process, the existing pavement is granulated with the powerful milling and mixing rotor and processed by the addition of precise amounts of bituminous binding agents, cement and water. The result is a homogeneous construction material that can be used to directly repave the surface.

Tractor-Towed Stabilizers the WS-series for soil stabilization produces soils that can be paved and compacted as well as create load bearing surfaces. The tractor-towed stabilizer can be coupled to a tractor in just a few simple steps. The adjustable rotor plate ensures the homogeneous mixing quality of binding agent and soil. Side plates on skids, the mechanical belt drive on each side, and the effective milling and mixing rotor contribute to the high performance.

Production of a new, high quality base layer with the WR 240 (i) from the WR series.

Mobile Cold Recyclers: The WR series recyclers feature a variable mixing chamber and microprocessor-controlled injection systems for the addition of bitumen emulsion, water and foamed bitumen. In soil stabilization, machines with all-terrain capabilities mix binding agents into existing soils to produce load-bearing and workable soils that are ideal for future use in the construction of roads, freeways, parks and sports facilities, and industrial sites. When recycling road pavement structures, the existing asphalt pavement is milled off and the milled material is homogeneously mixed with the added binding agents. The new construction material mix serves as a basis for a new base layer with high load-bearing capacity.

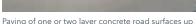
CR series cold recyclers are used for cost-efficient recycling of asphalt pavements. The addition of exact quantities of binding agents and water is guaranteed by microprocessor-controlled injection systems. The recycler's integrated discharge conveyor then transfers the recycled construction material to the material hopper of the paver following on behind, which immediately repaves it with a high degree of pre-compaction.

Mobile Cold Recycling Mixing Plant: The KMA series mobile cold recycling mixing plant can be easily transported and quickly set up in direct proximity to the construction site. The robust twin-shaft pugmill delivers high mixing performance. Microprocessor-controlled injection systems for the addition of a wide range of binding agents ensure that the materials are mixed precisely to formula. Thanks to the wide slewing angle of the discharge conveyor, the cold mix produced can be stockpiled or continuously loaded onto transport vehicles.



The W 380 CR (i) from the CR series during the cold in-place recycling of a road surface in a single pass.





to a width of 16 m with the slipform paver SP 164



Paving of a concrete safety barrie including reinforcement with the slipform paver SP 33.

Slipform Pavers

Offset Slipform Pavers: WIRTGEN offset slipform pavers continuously pave monolithic concrete profiles with a paving mold mounted on the side of the machine. Here, the concrete from a concrete mixer is transported into the offset mold via a loading conveyor or an auger conveyor. To enable more efficient site logistics, the offset mold can be mounted on the left or right-hand side of the machine. Numerous paving molds in different shapes and sizes cater for a wide range of paving applications, e.g. paving concrete safety barriers, curb profiles, drains, gutters, or narrow footpaths.

Inset Slipform Pavers: The concrete is placed directly in front of the machine and distributed by a spreading auger or a spreading plow. Vibrators consolidate the concrete homogeneously and the mold forms it at the specified width and thickness as the slipform paver advances. Integrated dowel and tie-bar inserters position the steel reinforcement as specified in the project brief. The finishing beam and the super smoother assure exceptional surfaces. Inset slipform pavers cost-effectively produce even and hard-wearing concrete surfaces with working widths from 1.0 m to 16.0 m - or, in exceptions, even wider - in the construction of freeways, interstate highways, airport runways, or railroad tracks.

Ancillary equipment: Placer/spreaders and texture curing machines round off the product range.

Surface Miners and Cross Application Miners

Surface Miners: Designed and constructed especially for the tough operating conditions encountered in open-cast mining, Surface Miners extract primary resources such as coal, gypsum, rock salt, phosphate, bauxite, or limestone with uniaxial compressive strengths of up to 80 MPa with high purity and maximized yield from deposits. Centrally positioned underneath the machine, the cutting drum can be customized to meet the customer's specific needs. The extracted material can be deposited behind the machine in windrows, sidecast in heaps by an integrated discharge conveyor, or loaded directly onto trucks.

Cross Application Miners are characterized by their suitability for a wide range of applications. They are used in demanding infrastructure projects for cutting routes, lowering tunnel floors, in port construction, or in the construction of water retention basins. Cutting drums are available for the mining of hard or soft rock. In most cases, the extracted material is loaded into conventional, road-legal dump trucks with the machine's integrated discharge conveyor. Due to frequently changing locations, Cross Application Miners are easier to transport from site to site than Surface Miners.

The Surface Miner 220 SM (i) 3.8 with a 3.8-m-cutting drum for the efficient extraction of soft rock and stone.





Key Technologies

WIRTGEN provides a wide range of products and pioneering technologies for road construction and surface mining. With a strong focus on innovation, quality, and efficiency, the company sets new standards across the industry.

Cutting Technology: Ideal interplay between the milling drum, the toolholder, and the picks is essential for precise and efficient removal of pavement layers. WIRTGEN is the market leader in cutting technology, and offers its customers perfectly coordinated, high-performance cutting systems. This process is above all driven by practical experience in the field and feedback from customers.

Leveling Technology WIRTGEN leveling technology controls height, depth, and slope to ensure the most precise results. Here, the system continuously compares the actual values with the preset target values and compensates for the deviations with proportional control. The state-of-the-art machine technology reduces the operator's workload and delivers consistently good leveling results. WIRTGEN also offers its customers reliable hardware and software developed in-house.

Machine Control System: A high-quality machine control system is integrated into WIRTGEN machines. Here, the large proportion of software developed in-house plays an essential role in assuring the operational reliability of the machines. Many years of experience in software and hardware development also enables greater and more flexible machine functionality with regard to the range of applications and customer specifications.

Mixing Technology: WIRTGEN recyclers granulate existing asphalt pavements with their milling and mixing rotor and prepare it in-situ by the addition of precise amounts of bituminous binding agents, cement and water. Heavy-duty, microprocessor-controlled water spraying systems ensure exact compliance with the specified dosing of additives such as water, emulsion, or foamed bitumen. The result is a homogeneous construction material that can be used to directly repave the surface.

Concrete Paving and Concrete Reinforcement: During concrete paving, precise level and cross slope control as well as the exact placement of reinforcement are essential for the production of high-quality concrete profiles. Advanced WIRTGEN machine technology assures consistently good results regardless of the challenges encountered on construction sites and considerably reduces the machine operator's workload.



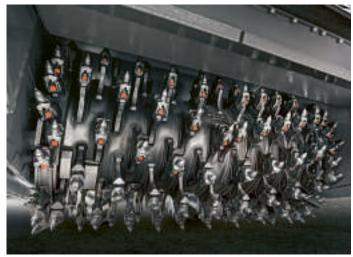
www.wirtgen-group.com/wirtgen



Technologies that make our products successful and unique. Specialized and pioneering - that's what sets us apart.







IMPRESSIVE QUALITY



FOR ASPHALT PAVING



VÖGELE has the right solutions for all construction contractors' needs

Machines for the Biggest Challenges

When it comes to challenging infrastructure projects, road pavers and mobile feeders from VÖGELE are at work around the globe. Whether it's a Formula 1 racing circuit, an airport runway, a mountain pass, or a freeway construction project - machines from VÖGELE consistently fulfill the most stringent requirements. They also impressively demonstrate their proven high quality, efficiency, and reliability on everyday projects for the construction of urban streets or pathways.

A Long-Established Tradition

Founded almost 190 years ago, VÖGELE is one of the oldest industrial enterprises in Germany. Over the years, the small forge grew and grew and eventually became the market leader for road pavers. Essential factors in the success of the company are the seamless product range, the years of experience and expertise, and the company's own manufacturing facilities in Ludwigshafen, Germany. At the state-of-the-art brand headquarters, around 1,200 specialized staff develop and construct machines to meet the needs of the global market.

High Efficiency

VÖGELE products are characterized by high efficiency, ease of maintenance, and low operating costs. The machines set benchmark standards in terms of Total Cost of Ownership (TCO) and offer high and stable value retention. These factors make VÖGELE the first choice for paving contractors who appreciate real efficiency and outstanding quality.

Innovative Technologies

The goal of every innovation developed by VÖGELE is the improvement of processes through user-friendliness, efficiency, safety, sustainability, and quality. Examples of this are the SprayJet and InLine Pave paving technologies. Further technologies such as the ErgoPlus operating concept, high-compaction technology, or hydraulic tamper stroke adjustment, set standards around the world. At the same time, VÖGELE is a powerful driver in the completion of digital solutions – for instance, in the field of construction site documentation.



The smallest VÖGELE paver can accomplish paving widths as narrow as 0.25 m.

Perfectly Tailored Solutions

VÖGELE offers an extremely broad spectrum of products including road pavers in an impressively wide range of sizes, paving screeds, mobile feeders, and digital solutions. The pavers offer paving widths between 0.25 and 18 m, a variety of optional equipment, and technical modifications that guarantee perfectly tailored paving solutions for a wide range of applications and markets.

Road Pavers: VÖGELE currently offers around 40 different road paver models. Depending on the paving task and requirements, customers can choose the ideal paver for the job from a total of five different classes: Mini, Compact, Universal, Highway, and Special. In addition to this, the pavers can be fitted with a range of optional equipment to expand their functional capabilities.

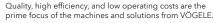
Paving Screeds: VÖGELE's core competence. Around 15 different extending screeds and fixed-width screeds enable paving crews to achieve highest-quality and precise paving results in every application Numerous technologies such as high compaction or hydraulic tamper stroke adjustment guarantee maximum quality and short set-up times.

Mobile Feeders: These machines ensure uninterrupted, efficient, and high-quality paving, particularly on large-scale construction projects: The mobile feeders from VÖGELE enable shock-free material transfer and a constant flow of material to the paver. Depending on the version - as a standard or an offset mobile feeder with a slewing belt conveyor - they are suitable for a range of different applications.

Digital Solutions: VÖGELE is automating numerous paver functions to lighten the operator's workload, increase safety on the job, and boost efficiency. Customers requiring precise paving and construction site documentation can also use the digital WPT Paving. The central platform for this is the John Deere Operations Center: Relevant data can be retrieved and construction site processes can be efficiently connected and coordinated with one another.



With convenient functions such as commissioning from the ground (PAC), VÖGELE sets standards when it comes to user-friendliness.







Focus on users: The ErgoPlus 5 operating concept is clearly laid out, ergonomic, and with the optional touch display, offers all prerequisites for digital road construction.

Key Technologies for Road Construction

Efficient and sustainable paving methods, automated functions, ergonomic operating concepts, smart screed as well as grade and slope control technologies: With numerous technologies VÖGELE makes paving easier, safer, of higher quality, more sustainable, and more efficient.

Applications Technology: VÖGELE innovations such as Spray-Jet technology and the InLine Pave paving method are the answer to increasingly strict demands in road construction. With InLine Pave, the mobile feeder, the binder course paver, and the surface course paver follow directly behind each other. Binder and surface courses are paved "hot on hot" in a single pass. This not only increases the quality and stability of the road surface, but also saves time, costs, and resources as well as reduces CO₂ emissions. The SprayJet technology from VÖGELE became established as a proven concept around the world many years ago: Construction contractors can use the corresponding paver with spray assembly for bitumen emulsion for paving thin layers hot on sealant (DSH-V) and to deploy it as a standard paver.

Machine Technology: A constant focus on users: VÖGELE sets standards in the areas of user-friendliness, safety, and sustainability with numerous machine-related technologies and functions. These include the standardized ErgoPlus paver operating concept, comfort and safety functions, automated processes, an effective ventilation system, and the EcoPlus emissions reduction package.

Screed Technology: The screed is the heart and soul of every asphalt paving job. It distributes the material, profiles, and compacts it. This is the reason why VÖGELE develops, designs, and builds its own screeds with paving widths of up to 18 m and has been a driver of innovation in this area for decades. With high-compaction technology, VÖGELE screeds achieve compaction values of up to 98 percent. Functions such as hydraulic tamper stroke adjustment reduce set-up times and increase the paving quality.

Leveling Technology: The Niveltronic systems and Auto Grade for Automated Grade and Slope Control were developed and realized by VÖGELE on the basis of many years of experience in grade and slope control. The fully-integrated systems are perfectly coordinated with the machine technology of VÖGELE road pavers. In combination with a variety of sensors or sensor systems, such as the Big MultiPlex Ski, this enables road construction contractors to achieve maximum evenness in every application.



TRUE MASTERS



COMPACTION





Battery-electric rollers for lower CO₂ and noise emissions.

Rollers for Road Construction and Earthworks

Around the world, HAMM is well known for its innovative and efficient compaction technologies for road construction and earthworks. The range of applications includes asphalt compaction, soil compaction for the stabilization and preparation of subsoil, soil stabilization for load-bearing soils, and the construction of base and frost protection layers for resilient and durable roads. The machines from HAMM also offer a wide range of variants, equipment options, and functions specially tailored to local requirements.

A Long-Established Tradition

HAMM was founded in 1878 and has since brought numerous pioneering innovations to the market. HAMM developed the first diesel-engined road roller way back in 1911. This was later followed by further milestones including the first all-wheel-drive tandem roller and the first pneumatic-tire roller with all-wheel drive.

Pioneering Technologies

HAMM sets its focus on innovative compaction technologies, sustainable drive concepts, and digital solutions. For instance, oscillation compaction for homogeneous and low vibration compaction. The electrified rollers can now be used on construction sites where zero local emissions are required. The automated compaction process is enabled by the Smart Compact digital assistance system, which automatically regulates the compaction energy and modes in both drums on the basis of various parameters. For earthworks, HAMM offers Smart Compact for automatic adjustment of the compaction energy dependent on the properties of the ground.

Around 1,100 employees produce machines for the global market at the Tirschenreuth site. Assembly areas, production facilities, and a logistics center are optimally connected in the modern roller factory. Research and development at HAMM focuses both on the continuous improvement of existing machines and on pioneering technologies. This means HAMM is and will remain a strong partner for building the roads of today and tomorrow.

HC 200i C P compactors



HX 70i VO-S tandem rollers





HD+ 90i VO articulation steered tandem roller

The Right Model for Every Job

The extensive range of machines encompasses a wide range of compactors, tandem rollers, and pneumatic-tire rollers. Numerous solutions for the optimization of compaction processes complement the portfolio. These enable HAMM to offer practical, ideally tailored solutions for all compaction tasks in road construction and earthworks. With over 200 models between 1.5 and 25 t, HAMM offers an extremely diverse product range for earthworks, road construction, and gardening and landscaping worldwide.

Compactors: The product range covers articulation steered compactors ranging from 5 and 25 t for all compaction tasks. There is a choice of compactors with smooth drums, padfoot drums, VIO drums (Vibration and Oscillation in the same drum), VC drums (Vibration Crusher), or VA drums (Variable Amplitude).

Tandem Rollers: With articulation and pivot-steered tandem rollers between 1.5 and 14 t, HAMM offers a wide range of machines for all markets and any application in asphalt construction. Examples of this are the HD CompactLine, HD+ and HX series, which impress with their user-friendliness and high compaction quality.

Pneumatic-Tire Rollers: HAMM offers pneumatic-tire rollers with operating weights ranging between 8 and 28 t for all markets. The pneumatic-tire rollers are suitable for compaction in earthworks and asphalt construction and offer numerous benefits such as extreme versatility and efficient compaction performance.

HC 70i compactor with VIO drum





Key Technologies

HAMM relies on the latest key technologies to ensure maximum efficiency and quality:

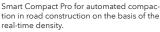
Oscillation: Dynamic compaction systems enable significant increases in compaction performance for asphalt construction and earthworks. This power increase reduces the number of double passes for far more efficient compaction. Such systems include the oscillation system developed by HAMM. It is scientifically proven that it produces homogeneous and high-quality compaction results. HAMM offers the world's most extensive range of oscillation rollers for asphalt construction (type designations VO, VO-S, OT, VS-OS, VIO) and earthworks (type designation VIO). HAMM is the only manufacturer to also offer compact tandem rollers with weights from 2.5 t and oscillation in its portfolio, as well as fully electric rollers with oscillation for zero local emissions.

Digital Assistance Systems: Resource conservation and digitalization are globally discussed topics of our time. At the same time, the requirements for compaction quality and documentation are increasing. Plus, it is becoming increasingly difficult for construction companies to recruit personnel qualified to operate rollers and other construction machines. Further to that, the generation of 'digital natives' will soon be getting behind the wheel of road construction machinery. They are already skilled in the handling of digital solutions. It is against this background that HAMM has worked for many years on the development of various digital assistance systems, solutions, and digital interfaces, all of them focused on smart and simple compaction. Examples of this are Smart Compact for automated compaction in road construction and earthworks as well as Track Assist and WPT Compacting for construction site documentation and analysis.

Alternative Drive Concepts and Electrification: For many years now, HAMM has been developing efficient machines that steadily reduce fuel consumption and, in turn, CO_2 emissions. In an effort to make construction site operations more resource-efficient, the ECO mode and the Power Hybrid roller of the HD+ series, were milestones along the way. Since 2022, HAMM has joined the ranks of the manufacturers of fully-electric construction machines with an additional eight electrified HD Compact-Line tandem rollers.



www.wirtgen-group.com/hamm





EFFICIENT AND SUSTAINABLE



MATERIAL PROCESSING



KLEEMANN crushing and screening plants stand out on account of their outstanding quality and high utilization rates, easy operating, and impressive versatility.

Solutions for Processing Rock and Stone

The name KLEEMANN stands for innovative mobile crushing and screening plants. They impress with outstanding reliability, operator-friendliness, and versatility. The plants are primarily used for the processing of quarried stone and in recycling scenarios.

The plants are manufactured with absolute precision on the factory site at the company headquarters in Göppingen, Germany. The factory brings together all production processes from prefabrication to final assembly under one roof.

Pioneering Work

KLEEMANN can look back on a legacy of 160 years of experience and expertise. The 1920s saw the construction of the first mobile plants for the processing of rock and stone. In the 1960s, the focus shifted to stationary crushing and screening plants. KLEEMANN is also a pioneer in the construction of tracked mobile plants.

Innovations for Maximum Efficiency

KLEEMANN plants are characterized by their carefully considered and practice-oriented solutions. A constant eye on the entire materials processing workflow. With the SPECTIVE operating concept, KLEEMANN provides an intuitive user interface that makes the plant operator's work much easier.

Optimum material processing through multi-



KLEEMANN offers a broad spectrum of products for the processing of guarried stone:

Tracked Mobile Jaw Crushers: The MOBICAT series crushing plants are used for pre-crushing almost all types of quarried stone as well as in recycling processes. The output of the MOBICAT crushing plants, however, is not determined by the jaw crusher alone, but rather the decisive role played by the optimized interaction between all of its components. The focus today is on cost and environmental awareness, availability, versatility, and the quality of final product to be achieved.

Tracked Mobile Cone Crushers: The MOBICONE mobile cone crushers are used in medium-hard to hard and abrasive natural stone and for the processing of primary resources extracted by mining or quarrying. Cone crushers deliver the best final cubic grain sizes in the second and third crushing stages. Cone crushers are above all ideal for intelligent line coupling with primary crushers and screening plants.

Tracked Mobile Impact Crushers: The MOBIREX mobile impact crushers are used in soft to medium-hard natural stone as well as in recycling scenarios. The performance of the plants is astounding – not just in terms of pure volume reduction. The focus today is on cost and environmental awareness, availability, versatility and, above all, the quality of final product to be achieved. The MOBIREX plants crush stone so efficiently that the grain shape, grain size distribution, and cleanness comply with the strict standards applicable to concrete and asphalt aggregates.

Tracked Mobile Screening Plants: The MOBISCREEN mobile screening plants are used for screening almost all types of quarried stone as well as in recycling scenarios. The classifying and scalper screens are available in double- or triple-deck versions. The spectrum of applications for MOBISCREEN plants is broad and varied. A wide variety of suitable screen surfaces are available for achieving the different final grain sizes and for different feed materials.

Tracked Mobile Stockpile Stackers: Mobile stockpile stackers MOBIBELT are used to ensure efficient logistics processes on production sites. The direct material transport from the crushing or screening plant to the dedicated stockpile means that additional material movements with the wheel loader can be avoided. This reduces operating costs and increases operational reliability and efficiency.

A KLEEMANN compact scalper at work at a



Powerful performance in quarried stone with a KLEEMANN impact crusher







Innovative technologies, easy handling, and maximum operator-safety -that's what KLEEMANN crushing and screening plants stand for.

Key Technologies

KLEEMANN relies on the latest key technologies to ensure maximum efficiency and quality:

Crushing and Screening Technology: The innovative crushing and screening technologies from KLEEMANN ensure ideal crushing and classification of the material. They are characterized by their outstanding performance, reliability, and endurance.

Drive and Material Flow Concepts: KLEEMANN uses three different drive concepts that offer the best possible solution depending on the task at hand. E-DRIVE, D-DRIVE, and H-DRIVE stand for diesel-electric, diesel-direct, and diesel-hydraulic variants. Sophisticated material flow concepts guarantee continuous and efficient plant operations.

Digital Operating Concepts: The intuitive SPECTIVE operating concept includes various ideally matched components that accompany and assist the machine operator from start to finish of each working day. The digital application SPECTIVE CONNECT enables access to all important operational data, detailed reporting, and provides relevant information in the event of faults and error messages - all on your smartphone.

KLEEMANN maintains its position as a leading provider in the field of materials processing through continuous innovation and the utilization of advanced technologies. The products and solutions help to master the challenges of the industry and achieve sustainable success.

Convincing performance with E-DRIVE or D-DRIVE drive concepts: the MOBIREX MR 100 NEO/NEOe.





www.wirtgen-group.com/kleemann

STATE-OF-THE-ART



ASPHALT PRODUCTION

W BENNINGHOVEN



The MULTI JET multi-fuel burner - can use up to four different fuels simultaneously, no matter whether liquid, solid, or gaseous

Innovations in Asphalt Production

For over 100 years, BENNINGHOVEN has been offering innovative solutions, highest quality, and outstanding efficiency for the production of asphalt for the construction industry. In the modern factory for the production of asphalt mixing plants in Wittlich, the company manufactures ultra-modern, flexible asphalt mixing plants and Retrofit components on an area of 313,000 square meters. The highly-qualified employees develop and manufacture all core components themselves - from heavy steel-work to complex control systems. To ensure efficient and high-quality production, BENNINGHOVEN relies on cutting-edge production processes, short paths, and a high degree of automation.

BENNINGHOVEN has always been a pacesetter in the industry. From environmentally friendly technologies for the production of rolled asphalts and asphalts with a high RAP content, to the production of temperature-reduced asphalts, the company develops solutions that are not only technically convincing, but also make a significant contribution to protecting the environment. One of the most significant recent developments is the MULTI JET multi-fuel burner. It can burn a variety of different fuels, including 100% green hydrogen.

Green Technology from a Green Factory

At the Wittlich site, BENNINGHOVEN not only produces sustainable asphalt mixing plants, but also sets standards in terms of environmentally friendly production. The factory is designed in accordance with the latest standards of the Energy Saving Ordinance. It makes use of advanced technologies that keep the carbon footprint as small as possible. Among other things, the production hall has ventilation systems with heat recovery, purely electric industrial trucks, and production requires no process water.

Sustainability as a Corporate Principle

The efficient use of energy and the responsible handling of resources have the highest priority. With pioneering solutions such as the REVOC system, BENNINGHOVEN is setting new standards in the world of asphalt production. Plant operators thus benefit from higher RAP feed rates while complying with strict emission limits. BENNINGHOVEN once again combines tradition and pioneering spirit with state-of-the-art technologies and offers customers optimum added value.

Smarter, Safer, more Sustainable -BENNINGHOVEN hot-gas generator system for maximum RAP feed rates with low emissions.





Retrofitting a REVOC system

Asphalt Mixing Plants

There are ideal plant solutions for all market needs: Whether transportable or stationary, or with production capacities from 100 to 400 t/h - BENNINGHOVEN asphalt mixing plants all have one thing in common: they are today's most advanced solutions for economical, flexible, and eco-friendly asphalt production.

ECO Asphalt Mixing Plants - The All-Rounders: The key advantage offered by ECO asphalt mixing plants is their modular design. Thanks to the "plug-and-work" principle, high-tech components can be retrofitted quickly and easily. This plant is also characterized by a high level of mobility and optimum flexibility - while suitable for stationary operation, it can also be quickly and easily relocated without any loss of production quality - a decisive advantage for temporary large-scale construction sites.

TBA Asphalt Mixing Plants - The Specialists: The TBA asphalt mixing plants are impressive specialists. They combine powerful plant performance with a modular design, high storage capacities of the hot bin section and mixed material loading silo, and forward-looking retrofit options for plant components.

RPP Recycling Plants: With an impressive production capacity of up to 400 t/h and an unlimited range of equipment options, the RPP series of asphalt mixing plants is the flagship of the BENNINGHOVEN product range. A particular highlight of the RPP is the high RAP feed rate of up to 100 percent. The BENNINGHOVEN RPP makes an effective contribution to energy efficiency, cost efficiency, and proactive environmental protection.

Retrofit Solutions: A Retrofit can be a more economically viable solution for an existing asphalt mixing plant than a complete new build. The replacement of outdated components with new, state-of-the-art technologies enables existing plants to be upgraded to the latest industry standards. For the owner, the advantage lies in the modernization of the plant and the associated increase in productivity with significantly lower costs compared to purchasing a comparable new plant.

Zero-Emission Burner Technology

BENNINGHOVEN is a world market leader in the production of burners for asphalt mixing plants and a manufacturer of multi-fuel burners for up to four fuels. With the world's first burner that can be fueled exclusively with green hydrogen, BENNINGHOVEN offers a groundbreaking solution for more sustainability in road construction. This technology enables the flexible and simultaneous use of four different fuels in three different physical states, which significantly reduces CO_2 emissions.



ECO 4000 asphalt mixing plant

Recycling Technology

The processing of reclaimed asphalt has a high priority when it comes to conserving natural resources. In view of this, BENNINGHOVEN offers a broad spectrum of hot and cold recycling feed systems. With our recycling plants, operators can produce asphalt mixes from up to 100 percent reclaimed asphalt pavement (RAP) and, in doing so, simultaneously protect the environment and cut their production costs.

Plant Control

The advanced BLS 4 control system for asphalt mixing plants from BENNINGHOVEN sets the focus on functionality and user-friendliness. With an optimized operating concept - either from a touchscreen, a tablet, or with pre-configured trends. Parameters based on the experience of mixing specialists were actively implemented here. The BLS 4 is subject to continuous life cycle management to ensure that the software and hardware are always up-to-date. And all this with a level of IT security that meets all of the current statutory regulations. Last but not least, the Recipe Generator for the dynamic generation of asphalt recipes with variable RAP feed rates - sustainability as it lives and breathes.

With a broad-based product portfolio and innovative key technologies, BENNINGHOVEN sets benchmark standards in the world of asphalt production. With products ranging from transportable asphalt mixing plants to recycling systems and Retrofit solutions, the company offers perfectly-tailored solutions for all asphalt production requirements. The advanced technologies help to protect the environment while increasing the efficiency and cost-effectiveness of the plants. BENNINGHOVEN remains true to its mission to develop sustainable and innovative solutions to meet all current and future challenges.



www.wirtgen-group.com/benninghoven





Mobile Continuous Asphalt Mixing Plants

CIBER plants are high-output solutions that are ideal for medium or large-scale projects and can be transported from site to site on one or two semi-trailers. They use state-of-the-art technology to guarantee high quality in the production of all types of hotmix asphalt while simultaneously achieving the lowest possible costs.

The iNOVA 2000 mobile continuous asphalt mixing plant from CIBER impresses with high production capacity, ease of operation, and an optimized maintenance concept. It is particularly efficient when only a few recipes are used, and recipe changes are seldom required. It offers a production capacity of up to 200 t per hour and can be transported from site to site on just two semi-trailers. The plant has up to six feed hoppers, each with its own weighing system for precise material dosing. The CIBER Total Air Burner and the innovative, automatic flue gas and temperature regulation ensure optimum fuel consumption.

Technology and Efficiency

Mixing is carried out externally in batch mode by a twin-shaft pugmill which, in addition to providing automatic control of the mixing time, ensures maximum homogeneity of the end product. Depending on the configuration, up to 40 percent reclaimed asphalt pavement (RAP) can be added, which increases the sustainability of the plant. Simple handling, fully-automatic operation, a diagnostics system and remote monitoring via the John Deere Operations Center™ ensure state-of-the-art plant control that maximizes efficiency and operational reliability.

With the iNOVA 2000 mobile continuous asphalt mixing plant and the associated tank systems, CIBER offers an innovative and efficient solution for today's road construction industry. The combination of high production capacity, mobility, and low operating costs makes these systems the ideal choice for medium to large projects. CIBER remains true to its commitment to improving the efficiency and profitability of road construction through advanced technologies and high quality.

The CIBER plants offer a combination of high production capacity, mobility, and low operating costs.





www.wirtgen-group.com/ciber

WIRTGEN GROUP Factories

At its factories around the globe, the WIRTGEN GROUP produces machines and plants that fulfill the highest quality standards. All factories are certified in accordance with the internationally recognized ISO 14001 standard for environmental management systems, which underlines the realization of responsible and sustainable production environments.



VÖGELE HEADQUARTERS: Ludwigshafen FACTORY SITE: 370,000 m² EMPLOYEES: ~ 1,200



KLEEMANN



HEADQUARTERS:	Göppingen
FACTORY SITE:	150,000 m ²
EMPLOYEES:	~ 600



BENNINGHOVEN

HEADQUARTERS:	Wittlich
FACTORY SITE:	313,000 m ²
EMPLOYEES:	~ 500
	THE REAL PROPERTY AND ADDRESS OF THE PARTY AND





CIBER



HEADQUARTERS:	Porto Alegre, Brazil
FACTORY SITE:	47,000 m ²
EMPLOYEES:	~ 200



Last updated: December 2024

WIRTGEN GROUP Factories in India and China



WIRTGEN GROUP Factory in Pune, India



WIRTGEN GROUP Factory in Langfang, China





End-to-end **sustainability** in all business processes

The WIRTGEN GROUP sees sustainability as a means for leveraging healthy growth and value creation that possesses the potential to shape the future development of the construction industry. How exactly do we put this into practice?

We have defined three fields of action that cover the entire process chain from manufacturing to the service life of our products. Here, we have identified numerous effective adjustment screws that enable sustainable progress in every one of these fields.

Our Factories

All WIRTGEN GROUP factories are characterized by the utilization of cutting-edge technologies and environmentally compatible processes. All of our factories are certified in accordance with ISO 14001, i.e. we work in compliance with strictly defined environmental standards and continuously improve operations at our factories and the manufacturing processes for our products. This has already enabled us to considerably reduce our energy consumption and CO_2 emissions. In addition to the use of a geothermal system in Tirschenreuth, a further important milestone is the commissioning of large-scale photovoltaic systems at the factories in India (2023) and in Windhagen (2024). This means that our customers also benefit from a reliable supplier that meets their high standards.

Machines and Plants

The development of machines and plants takes place on the basis of the requirements our customers must fulfill. The focus is set on the improvement of machine efficiency and the reduction of emissions without making any compromises with regard to quality and efficiency. The diesel engines of the majority of WIRTGEN GROUP machines can also run on regenerative fuels such as HVO, which temporarily enables a significant reduction of emissions. WIRTGEN GROUP machines with battery-electric drive concepts fulfill the requirements for zero local emission construction sites. We offer upgrades to make machine operation more efficient and more resource-friendly. At the same time, digital assistance systems and telematics solutions are making machine operations even more precise and efficient.

Production Systems

In order to realize a construction project successfully and sustainably, it is important to consider the entire process individually. Which machines and methods can lead to the successful achievement of the targets of the construction project? To determine this, we get together with the customer to analyze the project requirements and the desired result. Our approach here is based on the principle: Do More with Less.

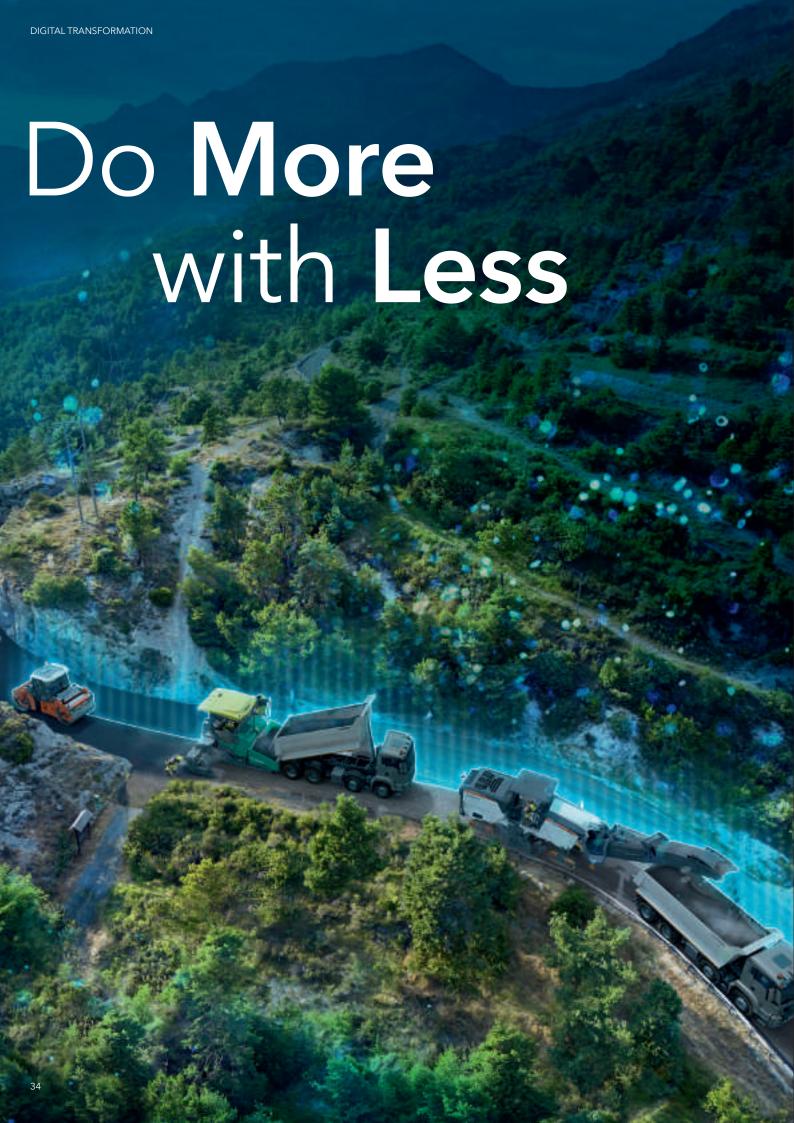
Recycling is a key factor, as it is often possible to reprocess and reuse high-quality reclaimed materials. Thanks to processes such as in-situ cold recycling or soil stabilization, many of the trucking movements otherwise required can be eliminated and the construction project can be completed in a shorter time. Both save time and money. The use of temperature-reduced asphalts also reduces energy consumption in the mixing plant and reduces the burden of heat and harmful emissions on the construction site.

These developments are supported by the digital transformation, which is also ongoing in the construction industry and is a strong driver of sustainable processes. The WIRTGEN GROUP is also playing a leading role in these developments.



www.wirtgen-group.com/sustainability





Digitalization continues to advance and is profoundly changing the construction industry. General developments such as the increasing shortage of skilled labor throughout the industry or far-reaching bureaucratic obligations make it increasingly difficult for our customers to meet the high standards of quality, documentation, and sustainability as well as complete projects on time. In our position as a technology driver, the integration of digital solutions into WIRTGEN GROUP machines and processes is absolutely essential.

Digital transformation is an important issue for the construction industry and ranges from the digitalization of administrative processes and the integration of AI in research & development to customer support. At the WIRTGEN GROUP, we translate these new potentials into competitive advantages for our customers. In the course of this, we work together with our customers not only on solutions for optimizing customer support and providing transparent data - not just for individual machines, but for the entire construction process and the automation of machines and process steps. In this way, we help our customers to increase productivity while simultaneously reducing operating costs and ensuring maximum resource efficiency - true to the motto "Do More with Less".

Here, we place a particular emphasis on digital assistance systems for machine operators that enable them to carry out their work with absolute confidence and deliver highest quality results. Today's diagnostic tools play a supporting role in machine maintenance and service. With our innovative planning and analysis tools, we help our partners to realize entire construction projects as efficiently and sustainably as possible. This also includes the correct and seamless documentation of all work carried out on the construction site. With our digital systems, all of this can be done simply and efficiently.



The advanced BLS 4 control system for asphalt mixing plants from BENNINGHOVEN sets the focus on functionality and user-friendliness.



Helps with fast error diagnostics: the WIDIAG Service-Diagnostics System



Digital networking of paving processes: WPT Paving enables precise paving and construction site documentation via the John Deere Operations Center $^{\text{TM}}$.

Improved Support Options with Digital Tools

With digital support solutions, the WIRTGEN GROUP enables connectivity between machines, personnel, and service units. This enables proactive scheduling of maintenance intervals and the identification of machine faults before they can cause expensive downtimes. The ongoing digitalization of support is a key element of our strategy of providing customers with fast, efficient, and comprehensive support wherever they may be around the world. We have set our focus on two approaches. On the one hand, establishing connectivity between machines and service facilities. With the aid of telematics data, we grant our global service organizations permission to gain insights into the machine status to enable them to respond accordingly. On the other hand, we establish connectivity between our customers and our service organizations to enable them to collaborate on finding a quick solution in the event of a fault or machine failure. The objective is always to maximize machine utilization rate and ensure the best possible predictability of service assignments and costs.

Transparency About Construction Projects

We offer smart monitoring systems that enables real-time analysis of processes on the construction site. Through the use of advanced sensor systems, machine and process data can be recorded, evaluated, and optimized. Efficiency on the construction site increases as machine fleets, material consumption, and the ongoing project status can be viewed in real time. Construction contractors and operations managers can thus always plan processes on the basis of the most accurate data. This provides an overview of the current project status at any time and enables them to make well-founded decisions based on validated data in order to optimize factors such as the use of resources. This minimizes idle times, optimizes the use of materials, and increases productivity. At the same time, performance trackers on machines deliver and document quantities such as milling performance or areas of asphalt paved.

SPECTIVE CONNECT sends all essential information to the





Process-Automation

The automation of both machine functions and administrative procedures also play an integral role in digital transformation. Because automated process and smart control concepts make it possible to optimize working procedures and increase their precision. The elimination of time-consuming manual tasks increases productivity and frees up the capacities of operating personnel and enables them to be redeployed more efficiently elsewhere - for example, for carrying out a larger number of projects or completing them in a shorter time. The operator retains full control over the machine. In addition, digital assistance systems help to optimize processes and performance in certain situations. This also reduces the ecological footprint.



www.wirtgen-group.com/digital-solutions



John Deere Operations Center™

The John Deere Operations Center™ is the central platform for digital solutions in all phases of construction projects - from planning to monitoring, analysis, and maintenance. It forms the link between construction sites and administration. WIRTGEN GROUP customers can access web-based information about their machines and construction sites on mobile devices at any time and from anywhere. This creates transparency and enables well-founded decisions to be made on the management of construction projects.





The WIRTGEN GROUP offers a comprehensive range of products and services, including advice on the purchase of new or used machines and plants and bespoke financing solutions. Even after the purchase, our experts for training, service on-site and in the workshop, and advice on applications remain at your side as partners you can always rely on. Our customers can always rely on a long-term service partnership. Our seamless network of sales and service locations underscores the promise firmly rooted in our DNA: Close to Our Customers.

Fit for the Job

Our wide range of training courses and applications consulting services help customers to gain the knowledge they require for the optimal operation and maintenance of the machines and plants. Well-trained personnel are essential when it comes to the efficient utilization and long-term operational readiness of machines and plants. The training programs cover both technical and application-specific procedural topics. In our Centers for Training and Technologies (CTT), WIRTGEN GROUP experts pass on their knowledge and offer personalized training courses tailored to meet the specific needs of customers.

Financing Solutions

Under consideration of concrete project requirements, specific customer needs and the current economic situation in the target country, the WIRTGEN GROUP is able to offer ideal financing solutions to its customers around the world. These can fundamentally be divided into "export financing" from Germany and "local sales financing" in the customer's country. Independent WIRTGEN GROUP dealers can also take advantage of appropriate solutions for the financing of WIRTGEN GROUP products, for their warehouses or rental fleets. This means that WIRTGEN GROUP customers and dealers always have a partner at their side who can offer flexible and bespoke financing solutions to enable and optimally plan investments in machines and plants.

Machines and Plants operated by trained personnel can be used more efficiently and create optimal added value





www.wirtgen-group.com/ training



www.wirtgen-group.com/financialsolutions



Our flexible Service agreements also include comprehensive workshop service.



Our extensive range of original spare parts guarantees machines a long service life.

Construction Site and Workshop Service

Even after purchasing, the WIRTGEN GROUP offers fast and professional service for construction sites and workshops. Our service agreements take the pressure off customers in practice and enable them to concentrate fully on their day-to-day business. The WIRTGEN GROUP's on-site service provides rapid and uncomplicated assistance on the spot, even in the event of complex issues. With highly-qualified service technicians and the ideal special tools, we can get machines up and running again in the shortest possible time. The convenient locations of our subsidiaries and dealers around the world enable short travel distances and rapid assistance whenever it is needed.

Location-Independent Support

Digitalization opens up entirely new perspectives in Customer Support. With mature fleet management solutions, maintenance work can be planned well in advance and unexpected machine downtimes can be avoided. This saves customers valuable time and resources by providing clear information and proactive maintenance support. Via the WIDIAG diagnostic system and Expert Assist, our smart solution for remote support, we offer fast and uncomplicated assistance that maximizes machine run times and reduces operating costs.

Spare Parts

The WIRTGEN GROUP's numerous years of practical experience and industry expertise are incorporated into the development of our original WIRTGEN GROUP spare parts. All spare parts are precisely tailored to the requirements of our machines and optimally support their performance. With original WIRTGEN GROUP parts, our customers ensure that they do only the best for their machines, because even a short breakdown of a machine costs time and money.

Our customers can rely completely on the quality and reliability that only original spare parts from the technology leader can offer. Our spare parts are produced in state-of-the-art manufacturing processes and provide outstanding reliability and a long service life. Our local service specialists provide comprehensive support during purchasing and guarantee the smooth and fast processing of your order.

Customer satisfaction is what matters most to us. In view of this, we have made the ordering of WIRTGEN GROUP spare parts as easy and uncomplicated as possible. With the WIRTGEN GROUP Parts Website and its user-friendly search functions, customers can find exactly the spare parts they need with just a couple of clicks The quick and easy ordering process in the Parts Shop is available 24/7 the whole year round.



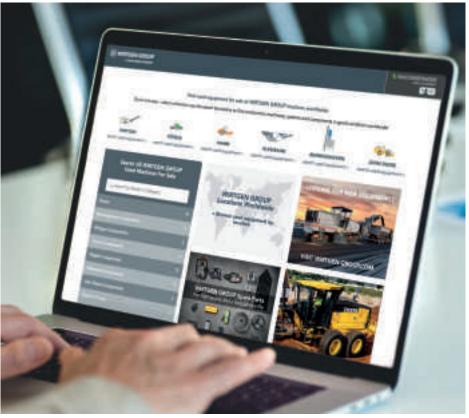
www.wirtgen-group.com/ customer-support



parts.wirtgen-group.com



Used Machines and Plants: Carefully maintained and repaired for reliable performance and a long service life.



WIRTGEN GROUP MachineFinder: the first choice for second hand.

Used Machines and Plants

The WIRTGEN GROUP MachineFinder offers a wide range of used construction equipment, plants, and components in good condition from around the globe. Using the comprehensive filter bar enables searches to be refined in seconds and the direct contact to dealers allows users to send requests for further information. With varied information such as photos, videos, engine hours, and other details, it provides everything potential buyers need to find the right machine at a reliable WIRTGEN GROUP subsidiary or an authorized dealer. It's well worth discovering what's on offer in the WIRTGEN GROUP MachineFinder and finding out what's new in the way of used equipment.



WIRTGEN GROUP Culture

We have a passion for our customers. That is why we focus entirely on their needs. With our value proposition Close to Our Customers, we say this openly, directly, and for all to see.

WIRTGEN GROUP employees are movers and shakers, partners, experts, and team players who tackle challenges together. Through trust and continuous training, we create highly efficient solutions that not only inspire our customers, but also sustainably increase their success.

Our fundamental values are the core of our mentality and contribute to the promise of unique products and services every day.

A spirit of partnership: As partners of our customers, what motivates us is their long-term success. We stand by their side and offer individualized support to enable us to develop optimal solutions together.

Reliable: We are committed to quality. Customers can rely on us to deliver solutions that fulfill the highest standards and offer enduring value and safety.

Innovative: As a technology leader, we set standards across the industry. Thanks to our powers of innovation, our customers always get the most advanced and efficient solutions that enable them to overcome all current and future challenges:

Specialized: We know exactly what our customers' specific tasks and processes involve. On the basis of this expertise, we deliver bespoke solutions that are perfectly tailored to the requirements of the markets and our customers.

We Go Above & Beyond

Our mentality is founded on the principle of surpassing defined targets - we pursue the ultimate goal of excellence in all we do. Through our uncompromising quality, high technological standards, and a positive attitude when faced with challenges, we combine tradition and innovation to astonish our customers and colleagues over and over again.

We Know our Stuff

Thanks to our thirst for knowledge, we build on our technological leadership rather than simply defending our position. This is why we always look to the future. Our attitude: We don't follow processes of change. We shape them.

We Own It

When we give you our word, it counts! We keep our promises and fulfill our responsibilities punctually and conscientiously. That's the way we are. It reveals our character. Thanks to this, we can grow and become even stronger.

We Win Together

Thanks to our readiness to help, mutual respect, and open communication, we all pull together. This enables us to fulfill our tasks faster, better, and more successfully and write new chapters of our success story- as a winning team, together with satisfied customers.



www.wirtgen-group.com/career







WIRTGEN GROUP

Branch of John Deere GmbH & Co. KG Reinhard-Wirtgen-Strasse 2 53578 Windhagen T: +49-2645-131-0

F: +49-2645-131-392

E-mail: info@wirtgen-group.com

