



HIGHLIGHTS

THE WIRTGEN GROUP BAUMA 2010 TRADE FAIR MAGAZINE



4 STRONG BRANDS

75 PRODUCTS ON DISPLAY

10 WORLD FIRSTS

VISIT US AT BAUMA 2010

Innovation is what drives our group of companies. As an independent, family-owned business, we rely on continuous product improvement to make you even more successful on your job sites. It is for this very reason that we are particularly pleased about the opportunity to present to you, at bauma 2010, the latest technologies developed by Wirtgen, Vögele, Hamm and Kleemann. Visit us and discover the future of road construction and cutting-edge technologies for the extraction and processing of mineral raw materials.

In keeping with our promise to be always "Close to our customers", we have joined all our forces and combined expertise for our bauma presence. For the very first time, all four strong brands of the Wirtgen Group will be jointly displayed at the bauma stand.

Get right into the Wirtgen Group experience – enjoy our shared passion and fascination for road construction and processing technology.



Wirtgen:
exhibits from five product divisions, compelling world firsts

- Market leader goes full speed on large milling machines: W 200 and W 210
- Unrivalled highlight for all mining experts: the largest surface miner 4200 SM



Hamm:
state-of-the-art compaction technology for road construction and earthworks

- Hamm reinvents pneumatic-tyred rollers: GRW 280
- Brand-new HD+ tandem roller models: the HD+ 90 and HD+ 110



Vögele:
Super series, Vision series and special equipment from the market leader

- Vögele presents its latest flagship product: the SUPER 3000-2
- High-performance material feeder MT 3000-2



Kleemann:
top-class jaw and impact crushers and secondary crushing plants for the natural stone and recycling industries

- Kleemann presents innovative impact crushers MR 110 Z and MR 130 Z
- For the very first time: Kleemann at the Wirtgen Group bauma stand





Dear Customers and Friends of the Wirtgen Group,

Welcome to the Wirtgen Group Trade Fair World. This time, bauma 2010 is one of the most exciting leading trade fairs of our industry. We all gaze with bated breath at the showcase of the construction machine industry. Many anticipate new and important stimuli in these economically turbulent times. As a forward-looking family enterprise,

we wish to impart to you a sense of continuity with our traditional brands. With our innovations and economical solutions, we wish to provide you with security. And on this firm basis, we wish to continue our business relationship with you on a basis of mutual trust. So, what can you expect from us at bauma?

Seven days full of highlights from „Road and Mineral Technologies“

We are overjoyed to be able to present a comprehensive range of products from the two business fields „Road and Mineral Technologies“ united on a single exhibition stand. Join us in looking forward to 75 exhibits and product highlights from all divisions! All four brands of the Wirtgen Group will be participating together under one roof at bauma for the first time. Kleemann enhances our product line-up with its high-quality mobile crushers and screens. We can thus offer our customers an even broader range including powerful crushers and screens and we can exploit numerous synergistic effects between the two fields of business to the benefit of our customers, too.

Ten world premieres for the four brands

Every bauma visit remains an unforgettable memory. bauma is always a superlative trade fair, be it in terms of quantity or quality. This year, we wish to surprise you with ten world premieres: you will find new developments from Wirtgen, Vögele, Hamm and Kleemann among the surface miners, cold milling machines, asphalt pavers and feeders, tandem and rubber-tyred rollers and impact crushers.



Thanks to the innovative force of our brands, we can offer first-class solutions and market-leading technologies to secure your success on the job site.

The full commitment of our sales and service team

True to our value proposition „Close to our customers“, you will meet qualified specialists with practical experience: encounter highly motivated Wirtgen Group experts from virtually all market segments who will be keen to swap notes with you during the seven days of the exhibition. Representatives of our 55 subsidiaries and the worldwide dealer network, as well as sales and service managers from the four headquarters, will provide you with in-depth advice on all questions regarding our machines and range of services.

We cordially invite you to discover the latest technologies of the Wirtgen Group.

With our very best regards,


 
 Jürgen Wirtgen Stefan Wirtgen

Visit the Wirtgen Group at bauma 2010
http://www.wirtgen-group-at-bauma.com/en/index.html
Google

24 hours, 7 days: the online world of the Wirtgen Group for bauma 2010

Welcome to the special website of the Wirtgen Group - it's well worth a click. Be sure not to miss our interactive online presence during the bauma. Here, you can obtain up-to-the-minute information on all key exhibition points of the Wirtgen Group around the clock from anywhere in the world:

- **Interactive 3D exhibition stand**
With the 10 world premieres from Wirtgen, Vögele, Hamm and Kleemann and all 75 Wirtgen Group exhibits. Browse through our animated stand and explore the product world from A to Z!
- **Videos and current impressions:** A video portal with short films on the Wirtgen Group and the latest technologies of the brands. You will also find image galleries covering a host of exciting topics.
- **News blog:** The latest news from our Wirtgen Group Trade Fair World. Here, you can also contact us directly and comment on topics.



- **Highlights:** An overview of all world premieres, technologies and exhibits. We also offer you an insight into the worlds of our Customer Service Pavilion here.
- **Information service:** Everything you need to know about getting here, our contact data at the exhibition and selected Wirtgen Group brochures for download.
- **Worldwide sales and services:** Are you looking for a specific contact in your country, complete with all of the relevant contact data? Our world map can lead you directly to the Wirtgen Group subsidiary or dealer responsible for you.

WIRTGEN COLD MILLING MACHINES

The new Wirtgen W 200 and W 210 large milling machines Costs down, performance up!

17 cold milling machine models now available

With the W 200 and W 210, Wirtgen launches two truly efficient models:

- Powerful engines and smart drive design featuring the ECO mode
- Low operating weight, compact dimensions for easy transport
- Reduced operating costs due to new WIDRIVE features
- Improved comfort and ergonomic standards: fewer controls, many automated features

Our recommendation: Visit the **Wirtgen Technology Pavilion** to discover the technical highlights of this innovative generation of large milling machines.

Broad range of applications: three milling drum speeds

Three milling drum speeds can be selected to optimize diesel fuel consumption, milling performance and overall efficiency as required by the specific job conditions: the lowest speed of $1,600 \text{ min}^{-1}$ enables maximum performance whilst ensuring low diesel fuel consumption and cutting tool wear. The $1,800 \text{ min}^{-1}$ speed ensures optimal area performance and a smooth surface texture in surface course milling applications. The speed of $2,050 \text{ min}^{-1}$ is ideal for fine milling applications performed at the highest possible ad-

vance rate. Milling speeds can easily exceed 30 m/min in these jobs to produce high-quality surface textures.

W 200

Engine: 410 kW/558 PS
Milling widths: 2 m; optional: 1.5 m und 2.20 m
Milling depth: 33 cm
Operating weight, CE: 27,186 daN (kg)

W 210

Engine: 500 kW/680 PS
Milling widths: 2 m; optional: 1.5 m und 2.20 m
Milling depth: 33 cm
Operating weight, CE: 28,186 daN (kg)



W 200



W 210

Tool extractors for cold milling machines

Replace quicker, work longer

The new Wirtgen cutting tool extractors provide a **significant increase in operator comfort**: their **intelligent automated system** facilitates the process of tool replacement and reduces replacement times. Two models are available:

- Hydraulically assisted cutting tool extractor with integrated control of the drum turning device
- Battery-operated hydraulic cutting tool extractor

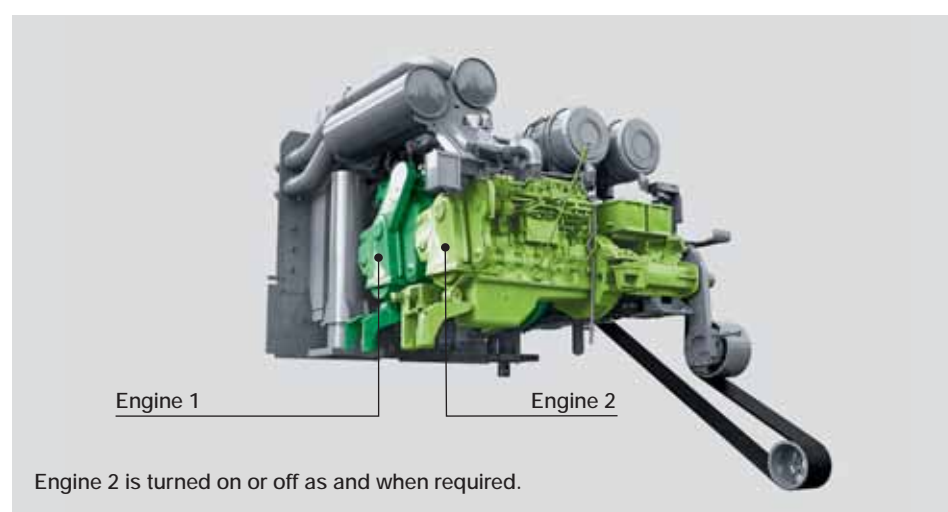
PTS (Parallel to Surface) and ISC (Intelligent Speed Control) – innovations in the W 200 and W 210
For more details, visit www.wirtgen.com. Please also visit our video portal!

The W 210 dual-engine concept:

Reducing fuel consumption by over 25%

The use of two diesel engines splits the drive power: the first engine achieves 276 kW while the second provides 224 kW. When in **transport mode or idle mode, only one engine** is running.

The **second engine** is added on for **increased performance requirements**. Both diesel engines can be operated at the **ECO speed of $1,600 \text{ min}^{-1}$** when in milling mode to save tremendous amounts of fuel even when working under full load!



Engine 2 is turned on or off as and when required.



Visit our stand to watch a real-life demonstration of our tool extractors!

WIRTGEN SURFACE MINERS



4200 SM: the GIANT among the surface miners 12 million tons per year

In 1980, Wirtgen GmbH built its first-ever surface miner for the extraction of raw materials from opencast deposits. Today, **Wirtgen is the market leader in this segment**, offering a sophisticated product range for

opencast mining that has been tried and tested in operations around the globe. The latest large-scale addition to this range is the 4200 SM: the mining giant will be one of the world firsts presented at bauma. With a

weight of over 200 tons and a length exceeding 30 m, this huge machine is **the heaviest and longest exhibit** on display at the stand. The 4200 SM is available in **two configurations** customized to hard or soft rock.

New productivity levels in large-scale opencast mining

- Annual mining capacity of up to 12 million tons in soft rock, e.g. coal
- Made-to-measure cutting drums for soft rock (up to 50 MPa) and hard rock (30 to 80 MPa)
- Two-stage conveyor system with 1.80 m wide primary and discharge conveyors, discharge conveyor lengths of 12 m or 16 m
- Large tanks to accommodate 2,900 l of diesel fuel and 10,000 l of water

Surface Mining = Simple Mining = Wirtgen

- Just one machine cuts, crushes and loads the material in a single pass
- Highly selective mining with low environmental impact, no drilling and blasting
- Most cost-effective mining method for useful minerals

4200 SM

Cutting width: 4.20 m
 Cutting depth: 0-65 cm (hard rock)/
 0-83 cm (soft rock)
 Engine power: 1,194 kW/1,623 PS
 Weight: max. 211,300 daN (kg)

WIRTGEN SLIPFORM PAVERS



Its modular design enables the dowel bar inserter of the SP 500 on display to be widened to up to 6 m. It can place dowel bars with a maximum diameter of 40 mm and a maximum dowel bar length of 600 mm.

Wirtgen dowel bar inserter: Greater flexibility of use

In the slipform paver division, Wirtgen offers a broad range of products in all performance classes, comprising **ten machines for offset applications and the paving of concrete slabs**. The machines impress not only with their wide range of applications, however, but also with state-of-the-art technology and innovative components: the Wirtgen dowel bar inserter is one of the technical highlights in this product division, and is being improved continuously.

New modular concept
 The base plates of the dowel bar

inserter with their maintenance-free, newly designed feeder concept are now **fully movable complete with the vibrating frame**: This enables the dowel bar inserter to be flexibly adjusted to changing dowel bar spacings, which enhances productivity. If the dowel bar spacing is to be changed, for instance, from 250 mm for a motorway project to 300 mm for an airport project, the new spacing can be set quite easily thanks to the movable base plates and the **equally movable vibrating needles**.



By the pros for the pros

The new Wirtgen Concrete Slipform Paving Manual, Part 1 "Curb, barrier, sidewalk and multipurpose applications", can be ordered or downloaded from www.wirtgen.com.

WIRTGEN COLD RECYCLERS

2200 CR:

Now with down-cut feature and a working width of 3.80 m!

Expanded range of applications for the **2200 CR** cold recycler: a **milling and mixing assembly offering a working width of 3.80 m** is now available in addition to the standard width of 2.20 m. Both **recycling and paving can be carried out across the full working width**. Just a single pass of the machine suffices to economically recycle a complete traffic lane. The **down-cutting process** is yet another new option: **milling in the direction of travel** optimizes the grading curves of the milled material. Yet customers remain fully flexible here as well: the machine can be converted to up-cutting mode simply by exchanging the drum gearbox.

Compelling features for real-life application

- Cold recycling of asphalt pavements at depths of up to 150 mm
- Versatile use of binding agents: water, bitumen emulsion, foamed bitumen
- Dual machine concept for maximum utilization: also suitable for use as a cold milling machine

2200 CR

Engine power:	708 kW/963 PS
Working width:	3.80 m
Working depth:	150 mm
Paving screed:	Vögele AB 375 T



Its engine power of 708 kW provides the 2200 CR with ample reserve capacity for challenging in-situ cold recycling jobs.

WIRTGEN BINDING AGENT SPREADERS

Wirtgen and Streumaster – top partners:

Paving the road to global success

For the last three years, Wirtgen and Streumaster have jointly offered the **broadest and most innovative product range across all performance classes**.

Whether for self-propelled Wirtgen soil stabilizers or cold recyclers – Streumaster binding agent spreaders are always a perfect match: the range extends from cost-efficient A class models to **spreaders equipped with a computer-controlled rotary feeder** to ensure utmost spreading precision. Having started at the European level, the partnership of the two manufacturers has grown to a global scale as a result of **fully utilizing existing synergies**.

SW 10 TA

- Single-axle or tandem-axle trailer with suspended drawbar
- Perfect for soil stabilization
- Low maintenance requirements, great ease of operation
- Container capacity: 10 m³

SW 16 MC

- Built-up unit for 3-axle or 4-axle trucks
- Versatile use in soil stabilization and cold recycling
- Electronically governed discharge and spreading of the binding agent
- Container capacity: 16.5 m³



A “dream team” benefiting from perfectly compatible technologies: a WR 2000 from Wirtgen and SW 16 TC from Streumaster working in tandem.

WIRTGEN CUTTING TECHNOLOGY

Wirtgen XR cutting tools for stabilizers and recyclers:

Extended durability, lower costs

The system of XR recycling tools – XR being short for “Extended Run” – offers a **significantly enhanced resistance to wear and tear** for maximum milling performance levels both in soil stabilization and cold recycling. For the first time, a range of cutting tools will be launched that has been accurately tailored to the specific requirements in these two fields of application. An **entirely new tool design and new composite materials** set new standards in terms of the durability and economic efficiency of the wear tools. The range of tools has been developed in cooperation with Betek, Wirtgen’s system partner.

Key innovations of the XR cutting tool range

- High durability due to optimized carbide tip
- Break-resistant tool shank due to proven tempering process
- “Two-in-one” tool head and wear plate merged in a single component
- Optimized durability due to highly wear-resistant material
- Improved toolholder protection due to reinforced cone geometry
- Thick-walled clamping sleeve with optimized retaining loops



The XR cutting tool series from Wirtgen includes four new tool models: W6/22 XR, W6 AOC/22 XR, W6 SG/22 XR, W8/22 XR.

VÖGELE SUPER SERIES

The new SUPERlative heavyweight

Super Width, Super Powers – SUPER 3000-2

Vögele is presenting the newly developed SUPER 3000-2 paver at bauma 2010. The tracked paver features Vögele's innovative,

user-friendly „dash 2“ technology catapulting it to the top of the class of large pavers in terms of performance, technological edge and ergonomics.

With its laydown rate of up to 1,600 t/h and a pave width of up to 16 metres, large projects can be completed within a very short space of time and seamless asphalt pavements laid down at maximum width.

- Powerful DEUTZ diesel engine with 300 kW
- Can be combined with the AB 600-2 extending screed and SB 300-2 rigid screed
- Simple ErgoPlus® operating concept for maximum user-friendliness
- Optional heavy-duty kit



- Maximum pave width: 16 m
- Laydown rate up to 1,600 t/h
- Maximum layer thickness: 50 cm
- Transport width: 3.0 m
- Pave speed up to 24 m/min



Thanks to its performance range, Vögele's new large paver is ideal for new construction projects and for major rehabilitation projects, e.g. motorways and airports.

VÖGELE SPECIAL EQUIPMENT

Two high-performance mobile feeders for new applications

Mobile feeders from Vögele: MT 3000-2 and MT 3000-2 Offset



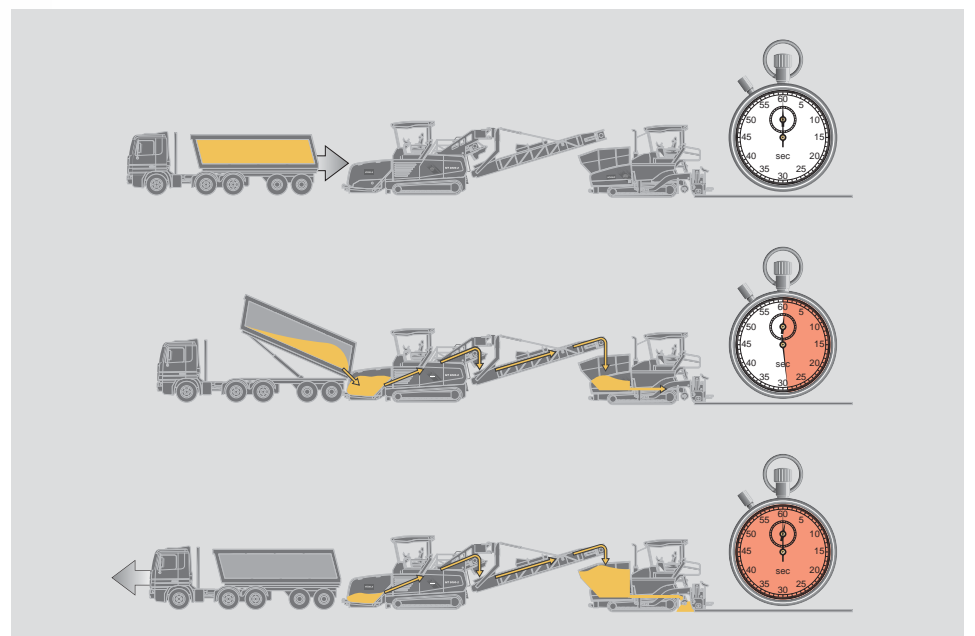
Smoothly functioning material management is extremely important for high-quality paving. Mobile feeders are therefore a vital instrument assuring both high quality and economical operation, especially on large sites.

With its numerous innovations and new features, Vögele's new **mobile feeder MT 3000-2** is outstandingly equipped to meet these requirements. The **offset version of the**

MT 3000-2 can do even more: its long-reach conveyor belt can be swivelled by up to 55 degrees, permitting completely new applications.

These include, for instance, feeding pavers with material from the side in confined conditions (foot and cycle paths), filling trenches with different mixes or backfilling the spaces in safety barriers on long-distance trunk roads.

- Reliable and uninterrupted supply of mix on large sites
- Total delivery rate of up to 1,200 t/h
- Feeder with very large total capacity; in combination with innovative material delivery management, only 60 seconds are needed to unload the mix truck.
- Modern ErgoPlus® operating concept for safe and easily learned machine operation



VÖGELE SPECIAL EQUIPMENT

Tracked paver for paving thin asphalt courses

Vögele spray paver SUPER 1800-2

In addition to the standard version, the SUPER 1800-2 is also available in a number of different versions for special technical applications. Additionally equipped with the **SprayJet module**, a conventional paver can be converted into an advanced spray paver allowing bituminous emulsion to be sprayed and the asphalt wearing course paved almost simultaneously in a single pass.

The **SUPER 1800-2 with SprayJet module** from Vögele is also ideal for paving thin courses on spray seal hot on hot (DSH-V). DSH-V is a cost-efficient asphalt paving process for the rehabilitation of wearing courses.



Compact, powerful and versatile: the SUPER 1800-2 can be used as a spray paver together with the SprayJet module or as a standard road paver.

- Maximum pave width: 6 m
- Laydown rate up to 20 m/min

- Compacting systems: TV, TP1
- Powerful PERKINS diesel engine with 129.6 kW at 2000 rpm

- Emulsion tank with a capacity of 2000 litres, optionally with 7000 litres
- Spray bar with a working width of up to 6 m
- Pressure of the spray jets: 3 bar
- Very little misting



VÖGELE TECHNOLOGIES

Highlights in Vögele's Technology Pavilion

Functions and designs of the latest screed technology

Visitors can experience Vögele's **screed technology** literally with all the senses in the Technology Pavilion measuring roughly 60 m². „High compaction“, for example, can be felt and heard in the JobSite simulator.

Things become more technical in the centre of the Pavilion, where an **extending screed** is being presented. The following topics are explained:

- Width control and heating system
- High compaction
- Pulsed-flow hydraulics

Take a trip around the world with „The Fascination of Road Construction“. Sites around the world prove that quality and surface accuracy are always superb with machine technology from Vögele!

Experience the latest screed technology live – in Vögele's Technology Pavilion.



VÖGELE VISION SERIES

Pave speed is trumps!

VISION 5100-2 and VISION 5203-2 ready to go

The four VISION machines are represented at bauma 2010 by the tracked VISION 5100-2 and the wheeled VISION 5203-2 pavers. The VISION series has been specially developed for the requirements of the American and Australian markets.

The **VISION 5100-2** belongs to the **8-foot class**. Thanks to its compact dimensions, it can handle all jobs in the municipal and urban fields. **Tracked** VISION pavers are fitted

with rubber crawlers on account of their high pave speeds.

Pave speeds of up to 76 m/min are no problem for the **10-foot VISION 5203-2**. The paver has a laydown rate of up to 1,200 tonnes per hour.

The **wheeled VISION 5203-2** can optionally be equipped with all-wheel drive.

■ 8-foot class (8 feet correspond to roughly 2.4 m)

■ 10-foot class (10 feet correspond to roughly 3.1 m)

■ American paver concept with the latest "dash 2" technology

■ Equipped with the user-friendly ErgoPlus® operating system



The VISION 5100-2 is an advanced tracked paver in the 8-foot class. It is specially designed for the American and Australian markets and it is the ideal choice for a whole variety of paving jobs.



VÖGELE NEWS

Construction of the new plant in full swing

The Vögele paver world takes shape

Investing **100 million euros** in the construction of a new factory is a clear sign of the Wirtgen Group's commitment to Germany as an industrial location, as well as to strengthening the Rhine-Neckar metropolitan region and securing jobs at Joseph Vögele AG.

In the fourth quarter of 2010, the most modern paver manufacturing plant in the world will be fully productive on a site measuring **37 hectares**.

- Investment volume: EUR 100 million
- Outdoor site: 370,000 m²
- Covered hall area: 66,700 m²
- Canopy roofs: 6,800 m
- Total gross floor areas:
 - Training / basic training: 2,890 m²
 - Headquarters: 7,890 m²



VÖGELE GO WEST!
Watch the new factory grow with our webcam:
www.voegel.info/webcam

HAMM TANDEM ROLLERS

More than you expect

HD+: the tandem rollers with the plus factor

Hamm has once again sparked a veritable explosion of **innovation** with its new HD+ series tandem rollers.

Optimum visibility

It's evident at first glance: **the cab is a real highlight!** It has a very roomy interior and offers an excellent overview of the machine and surrounding area. At the same time, the driver has more space than ever before! He can easily move the seat all the way to the outer edges of the machine and rotate it by 90° in each direction in every position.

Simple operation

Hamm has also set the trend once again in terms of operation. **The intuitive operating panel in all HD+ tandem rollers is permanently connected to the driver's seat.** This means it's always where it should be – in the field of view of the driver!

High-performance compaction

Another special feature: **the separate adjustment of frequency and amplitude in both drums.** This allows the tandem rollers to be precisely set to the requirements of new special-purpose asphalts.

An innovative type of 3-point pivot steering ensures optimized weight



The new HD+ is available in four weight classes ranging from 9 t to 14 t. In all sizes, the customer can choose between various compaction systems (vibration / oscillation) and driver's platforms (closed cab / open cab with ROPS hardtop).

distribution, greater driving stability, uniform drum pressure and thus perfect asphalt compaction.

Highlights of the tandem rollers:

- Largest driver's platform of any tandem roller to date
- Optimum visibility
- Exemplary ergonomic operating concept
- Frequency and amplitude separately adjustable in both drums
- Configuration as vibration or oscillation rollers
- Innovative 3-point pivot steering



In the XXL panorama cab, the driver experiences a completely new level of driving comfort with outstanding visibility. The seat, steering column and steering wheel can be easily adjusted. The operating panel always remains in the driver's field of vision, regardless of whether he is seated facing the direction of travel, or has rotated the seat by 90°.

Design Oscar and more for the HD+ New series has already garnered numerous international awards



Good design means "looking good". But it means a whole lot more besides: a successful design can also be one with an intuitive and ergonomic operating concept and compact dimensions.

Both of these points apply to the HD+ series rollers. They look good and are incredibly easy to operate. It was not without reason that they won the "iF design award Gold 2010". The tandem rollers thus rank among the 50 best products worldwide out of a total of nearly 2,500 submissions in the 2010 competition. This places them squarely in a league with products from such celebrated companies as Apple, Porsche, BMW, Festo and Lexus.



The "bauma innovation prize" is awarded every 3 years to the trendsetting innovations of the trade fair. This year, the jury selected the HD+ series from Hamm, among other things, and nominated the product range for the bauma innovation prize 2010 as one of the best products in the category "Design".



The jury of the "reddot" design competition also bestowed an award on the HD+ series. The criteria of this competition are the degree of innovation, ergonomics, functionality, longevity and environmental compatibility, which are important for every operator of construction machines.

HAMM TECHNOLOGIES

Step into the World of Compaction

Experience the compaction technology of today ... and tomorrow



No less than 18 of the machines exhibited by Hamm in Munich are making their worldwide trade fair debuts. Among all of these exhibits, you will also find the „**World of Compaction**“. Here, we show you the technologies that are used in our highly advanced compaction units and provide you with information on the state of the art. Among other things, you will gain fascinating insights into:

- The operating concept of the new HD+ tandem rollers



- The engine technology of the new CompactLine and
- The smart ballasting concept of the GRW rubber-tyred rollers

You can also test the machine operation and experience the operating concept that is implemented across all of our series: from the smallest tandem roller to the new rubber-tyred rollers, all Hamm rollers work with the same simple operating concept.

If you wish to learn more about technology-related topics such as „**Dynamic Compaction**“ or „**Measuring Compaction in Real Time**“, the Technology Pavilion is just the place for you to visit! There, we can show you how our systems function:

- HCQ – for measuring and documenting compaction
- Oscillation – fast and gentle dynamic compaction
- VIO – smart compaction technology for earthworks

And there's more: because we at Hamm provide our customers with first-class application advice as part of our after-sales service, we have compiled the principles of compaction in our „**Compaction application handbook**“.

You can browse through it and see for yourself in the Technology Pavilion. And it's available in seven languages, too, as we're always close to our customers – all around the world!



HAMM COMPACT ROLLERS

The new CompactLine from Hamm

The quiet power rollers with oodles of comfort

The manoeuvrable **CompactLine** rollers are welcome additions on road job sites the world over. Hamm has now further developed the „wasp-waisted“ high-performance tandem rollers in a number of areas.



Increased power

One new development is the **revised drive train** with quiet engine technology. This has increased the engine output by up to 15% in all rollers with a width of 1 m and greater.

More comfort

Another new feature is the **vibration-isolated driver's platform**: the seat, steering column and tread plates are mechanically separated from the frame. This means that no vibrations are transferred to the platform in the first place, allowing the driver to work in an even more relaxed manner.

A new engine and even easier servicing: all service points for the drive units are grouped on one side and are very easily accessible.

In brief – highlights of the rollers with operating weights from 1.4 t to 4.2 t:

- Extra-quiet, eco-friendly engines
- A perfect view of the drum edges and job site
- Vibration-isolated platform
- Variable compaction frequency
- Extremely easy maintenance

Plus, the 3-point pivot-steered tandem rollers continue to boast outstanding driving characteristics. The compaction power also remains high with a very low centre of gravity.

With these machines, producing even, bump-free

asphalt courses is simplicity itself.



HAMM RUBBER-TYRED ROLLERS

World debut by Hamm: the GRW 280

Optimum visibility for drivers of rubber-tyred rollers

Compact, flexible and safe – the new **GRW 280**. What's more, it is also easy to operate, comfortable and can be driven at an impressive speed. With an innovative overall concept, Hamm has turned the rubber-tyred roller into a real eye-catcher.

Hydrostatic drive

Technology enthusiasts will be impressed by the new roller with **hydrostatic drive**. This allows for **automotive driving** and ensures that the machine is extremely responsive to controls. High-performance disk brakes on the newly designed steering axle provide for the requisite safety.

Flexible ballast concept

One important advantage of the GRW series is the possibility of **rapidly changing the machine's weight**. The new rubber-tyred roller has large ballast spaces that can be filled with steel, concrete, sand or other materials by an industrial truck. In this way, the GRW can be **ballasted to an overall weight of 28 tonnes** to cover all possible applications.

XXL driver's cab

The driver's cab is also absolutely new. In the past, two driver's platforms severely restricted freedom of movement in the cabs of most rubber-tyred rollers. With the GRW from Hamm, everything is different: there is only one driver's seat, which can optionally be moved out to the outer edges of the machine and rotated. The operating panel is thus always in the driver's field of vision. On the whole, the operating concept now corresponds to that of a tandem roller. This means that operators can switch between the roller types flexibly and without needing time to familiarize themselves with a different system.

Optimum visibility

For the first time ever, the driver can now see the wheels of the roller while working thanks to the new design of the frame. A viewing channel also provides a view of the contact surfaces of the outer wheels. With these features, the new GRW series fulfils all the necessary prerequisites



for achieving first-class compacted asphalt paving.

The technical highlights of the GRW series

- Hydrostatic drive for high speed
- Advanced steering axle with disk brakes for greater safety
- Highly responsive controls for high compaction quality
- Flexible ballasting concept
- Spacious cab with optimum visibility
- Seat with console can be moved and rotated
- Entry from both sides
- Operating concept like that of a tandem roller
- Perfect view of the outer wheel edges



The most spacious cabin ever since the invention of pneumatic-tyred rollers: from his adjustable, rotating comfort seat, the driver always has a perfect view of both his machine and the construction site.

The somewhat different rubber-tyred roller:
International design awards for the GRW



The modern and intelligent design is one of the GRW's main qualities. It is also the basis for numerous practical advantages, such as a cab with just one driver's seat – an unprecedented development in this kind of machine – an unobstructed view of the wheels and improved compaction quality. With these strong points to recommend it, the new roller also impressed the jury of the **iF design award**. The jury of the "reddot" design competition also gave the GRW top marks and awarded it the coveted **"red dot award 2010"**. This acknowledges its extremely high degree of ergonomics, functionality, longevity and outstanding environmental compatibility.

KLEEMANN IMPACT CRUSHERS

Performance boost in the Contractor class!

Two MOBIREX power packs by Kleemann

Newly developed from the ground up: Kleemann impresses industry peers with its completely redesigned, **technically innovative MR 110 Z and MR 130 Z impact crushers**. The secret of their success: the material flow has been improved throughout the plant, rather than at individual components only. The result: a true **performance increase** achieved by **re-designing and re-engineering the material flow**. Expressed in figures, this translates into a **maximum feed capacity** of 350 t/h for the MR 110 Z and 450 t/h for the larger MR 130 Z. Both levels are unrivalled in their respective machine class.

The two new arrivals replace their predecessors MR 100 and MR 130. In the mobile impact crusher division offered by Kleemann, which includes seven models in total, the two crushing and screening plants represent the **Contractor class**. In terms of their flexibility, performance and technical features, these machines have been **specifically designed to cater to the highly varying requirements of this market segment**, which is clearly reflected by their strengths.



ALL new – from chassis to individual module: each component has been designed on the basis of the technical expertise, ability to innovate and many years of experience gained by the Kleemann engineers.

Unrivalled performance, best-in-class economic efficiency, high availability

- Efficient direct drive
- Tremendous versatility: rotor speed adjustable in four stages
- Suitable for quarry and recycling operations
- Completely new impact crusher of the SHB series

- Innovative, fully hydraulic crushing gap adjustment, controlled directly from the control panel
- 45% larger secondary screening unit
- Short setup times: hopper walls can be lifted hydraulically and locked automatically – no manual intervention required

MR 110 Z EVO

Feed capacity:	350 t/h
Crusher inlet:	1,100 x 800 mm
Drive power:	298 kW
Machine weight:	46,000 daN (kg)

MR 130 Z EVO

Feed capacity:	450 t/h
Crusher inlet:	1,300 x 900 mm
Drive power:	384 kW
Machine weight:	52,000 daN (kg)



The prototype of the new MR 110 Z impact crusher was extensively tested under real-life conditions – resulting in a true revolution in both material flow and performance.



Kleemann process expertise = top quality, sheer performance and ample room for project-specific design modifications

Triple Kleemann expertise in applications technology

Mobile plants for quarry and recycling operations

KLEEMANN JAW CRUSHERS

MC 110 Z: THE top-quality product for recycling and quarry applications

Its **highly mobile design** and **unrivalled flexibility** with a wide range of options **to cater to specific customer requirements** have made this crushing and screening plant one of the top-selling machines in the market for many years. All the more reason, therefore, for Kleemann to present the MC 110 Z to the industry audience at bauma 2010. The MC 110 Z is a mobile **jaw crusher with an exceptionally wide range of applications**. Equipped with an inlet opening of 1,100 x 700 mm in size, the MC 110 Z combines

the advantages of a professional stone crushing plant with those of a recycling crusher. The double-deck pre-screen can be fitted with various types of screening surfaces, enabling the material to be either conducted around the crusher or discharged directly to the stockpile.

MC 110 Z

Feed capacity:	300 t/h
Crusher inlet:	1,100 x 700 mm
Drive power:	266 kW
Machine weight :	47,000 daN (kg)



The perfect mobile Contractor plant for use in recycling and natural stone crushing: the MC 110 Z of the MOBICAT series.

KLEEMANN JAW CRUSHERS

MC 125 Z: high-performance primary crusher for quarry use



The MC 125 Z as part of a Kleemann plant combination operated in Scotland: the mobile jaw crusher was set up directly at the quarry face to pre-crush the 0 - 600 mm feed material to a 0 - 260 mm fraction.

The MC 125 Z is a tried and tested, extremely **robust primary crushing plant**. Its overall design, drive concept and performance have been specifically tailored to fully meet the requirements of quarry use. The **SStR 1,250 x 1,000 mm jaw crusher weighs as much as 49 tons**, is equipped with an especially long crushing jaw and has a drive power of 200 kW. During the crushing operation, the 540-kVA generator produces sufficient ener-

gy to drive additional external equipment, such as vibrating screens, a lighting system or mobile belt conveyors.

MC 125 Z

Feed capacity:	600 t/h
Crusher inlet:	1,250 x 1,000 mm
Drive power:	399 kW
Machine weight :	130,000 daN (kg)

KLEEMANN SECONDARY CRUSHERS

Mobile cone crusher MCO 11 S: best end-product quality – extremely efficient

The MCO 11 S excels as a **mobile secondary crusher suitable for use in all secondary and tertiary crushing stages**. Kleemann customers can choose from a broad range of performance classes: Kleemann offers as many as twelve mobile secondary crushing plants of the MOBICONE and MOBIFOX series, which have been designed either as **cone crushers** or **secondary impact crushers**.

Top-quality concrete and asphalt aggregates produced on secondary crushing units

The MCO 11 S can be operated, electrically interlocked, in combination with other machines, such as primary crushers and screens. Even complex processing sequences can be handled very effectively by operating several plants connected in series. The result is a **perfectly adjusted chain** of crush-

ing and screening plants offering **superior performance** – thanks to Kleemann's core expertise in **process engineering!**

MCO 11 S

Feed capacity:	350 t/h
Drive power:	356 kW
Machine weight :	75,000 daN (kg)



The MCO 11 S equipped with the KH 300 cone crusher forms part of a high-performance plant combination: one jaw crusher, two cone crushers and two screening plants supplied by Kleemann produce six high-quality end products in specified grain sizes.

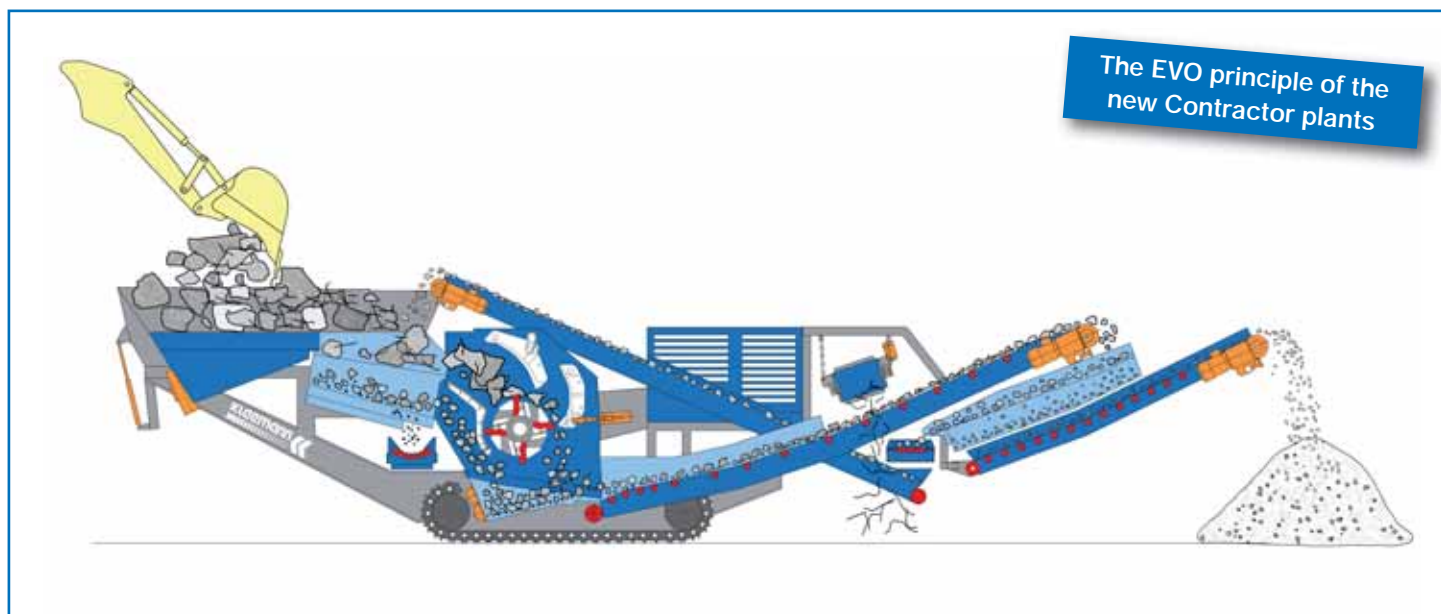
KLEEMANN TECHNOLOGIES

Fascinating insights: the inner workings of technology

Explore Kleemann innovations in the Technology Pavilion

To watch and understand the mobile crushing and screening process in detail – from feeder to discharge conveyor, from the crusher unit to the drive system: enjoy this opportunity while you visit our fascinating Technology Pavilion.

All innovation details, operating principles and process sequences of the new MOBIREX generation, the MR 110 Z and MR 130 Z, will be visualized by 3D animations and attractive insights into the inner workings of the plants. We won't reveal more at this stage – feel free to enjoy your very own discovery tour.



Embark on a fascinating journey through the inner workings of the new Kleemann impact crushers: get to know everything about the highlights of the new MOBIREX generation!

KLEEMANN NEWS

Successful start in Göppingen:

Kleemann facility sets a new standard

Kleemann has been a Wirtgen Group brand since 2006: the successful integration of Kleemann into the Wirtgen Group's sales organization has resulted in an increase in market demand. Today, about two thirds of the Wirtgen Group sales and service companies worldwide are offering Kleemann's premium products. The Mineral Technologies division enjoys a high overall market potential around the globe: Kleemann technologies are mainly required for infrastructural projects, the processing of mineral

materials and the recycling of demolition waste.

End-to-end process optimization

Production in the new facility has begun in November 2009. The crushers are now produced on four assembly lines in a cyclic process. Depending on order intake, the assembly lines can be flexibly adjusted to the various product divisions.

Production capacities have also been significantly increased as a result of end-to-end process improvements combined with the larger total facility size. New production lines have also been set up.

For instance, a completely new machining centre has been set up where crusher housings and rotors are machined in a CNC-controlled process. Another example is the new painting facility for large parts that offers a load-conveying capacity of up to 30 tons and approx. 2,000 m² of floor space.



Kleemann is prepared for further growth: with over 35,000 square metres of covered production area, the long-established supplier is well-equipped to master the challenges of the future.

Facts and figures about the brand-new plant

- New company site with a total facility size of over 125,000 m²
- Over 35,000 m² of covered production area
- Greater production flexibility and capacity
- In-house training centre for customers and machine operators
- State-of-the-art painting facility for large parts offers environmentally friendly powder coating



Series production of Kleemann mobile crushing and screening plants in an optimized process at the Göppingen facility.



WIRTGEN GROUP CUSTOMER SERVICE

The Customer Service Pavilion Experience

Explore three Wirtgen Group service worlds in our Customer Service Pavilion: troubleshooting on site, repair and maintenance in one of our specialist workshops and the tried and tested Wirtgen Group spare parts service. You will be delighted by our unmatched portfolio of services.

Wirtgen Group on-site service: we guarantee fast solutions

Our mobile field technicians provide quick local support. Perfectly suited equipment and special tools will get your machine back on the road quickly.

- Always at the forefront of technology: technicians receive regular training at our main plants

- Full service with the extra Plus: technical support, combined with applications consulting as required

- State-of-the-art equipment: quick diagnostics and troubleshooting using the **WIDIAG** system and special tools

New: WIDIAG – the Wirtgen Group’s cross-brand service diagnostics system

A new dimension of electronic diagnostics: WIDIAG acts as a link between man and machine and thus simplifies the troubleshooting process tremendously. As a result, customers benefit from:

- Minimized downtimes as a result of an even more efficient correction of any faults or malfunctions



Customer service that you can depend on: whether it’s a Wirtgen, Vögele, Hamm or Kleemann machine, or equipment supplied by our systems partners – our service technicians provide prompt solutions to all your service problems.

Wirtgen Group Original Parts: top quality, long service life



Parts and More, the perfect ordering tool – available as a printed catalogue and on DVD. The convenient system is also available online, worldwide and around the clock. Simply visit www.partsandmore.net.

We recommend the use of our original parts to retain the value of your machine in the long term. Optimized for the use in your machine and tailored to the needs of the operator, our original parts impress with a **long service life, outstanding quality** and **easy installation**. Custom parts developed for your specific requirements and full service packages designed with ease of maintenance in mind facilitate warehousing, dispatch and parts replacement. Our subsidiaries and dealers will promptly provide you with all the Wirtgen Group Original Parts you require, drawing from an inventory of more than **64,000 different items**. The Wirtgen Group’s in-house information and logistics

system provides reliable information – **24 hours a day, seven days a week**, from every corner of the world.

- High availability of spare parts and wearing parts at sales and service centres around the globe
- Quick and reliable order processing
- Comprehensive consultancy provided by trained service specialists when purchasing original parts
- Quick identification of spare parts enabled by comprehensive documentation systems, such as **Parts and More, WIDOS** and **WITRAIN**

Wirtgen Group workshop service: scope of services at main-plant level

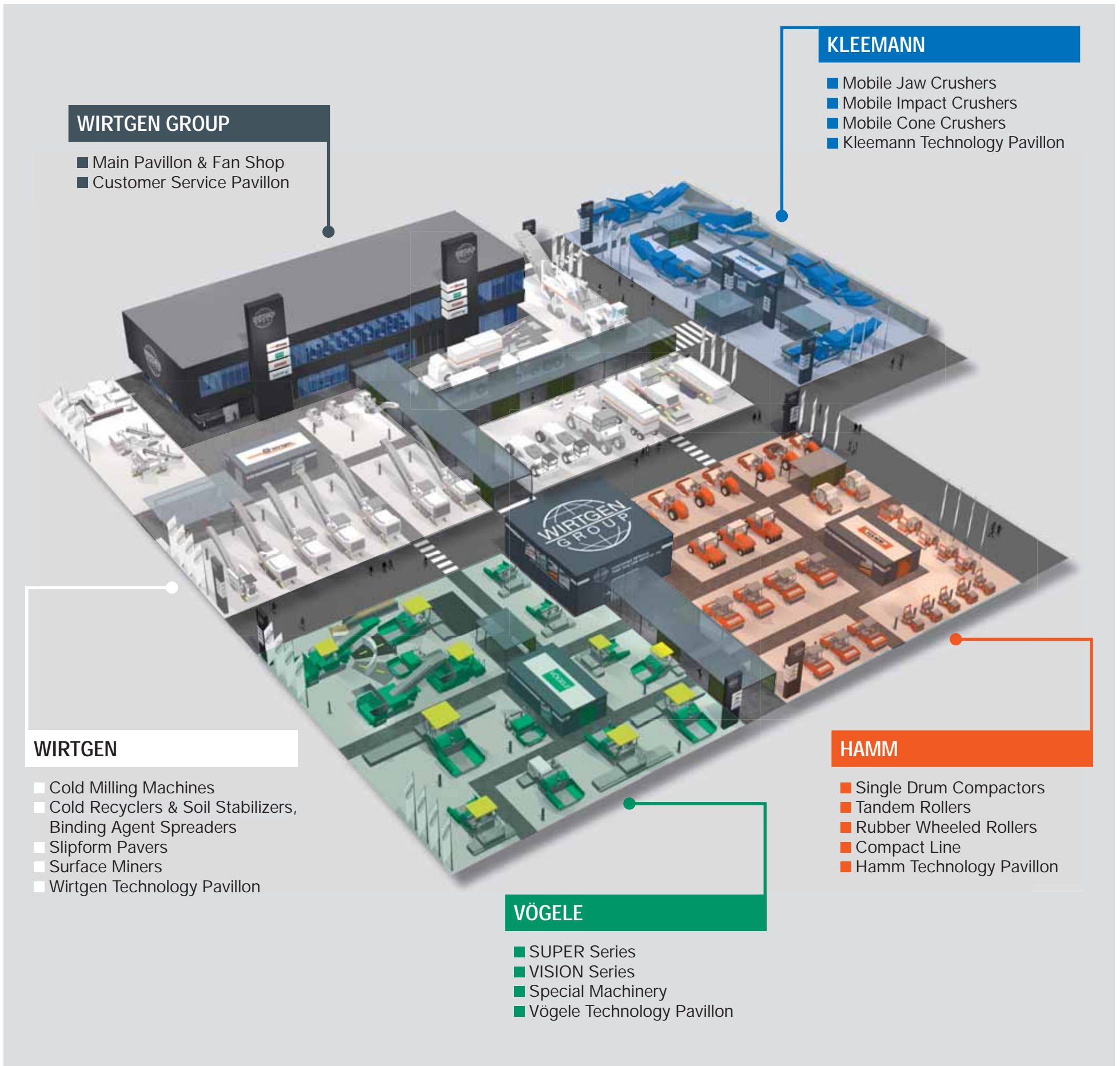
With **55 subsidiaries** and over **100 authorized dealers** in all parts of the world, we retain the close partnership and collaboration with our customers also during the after-sales period. **Inspection, repair, servicing, maintenance** and **overhaul** – experience our customer focus first-hand whatever your service need. Our local specialists are at your service not only when it comes to maintenance, but will also assist you with any upgrade of

your machines by **retrofitting optional features**.

- Quality matters: workshop service at manufacturer level
- Service provided by qualified technicians who undergo continuous training
- Replacement of wearing parts with original parts, performed by qualified staff
- Installation of optional equipment in accordance with good engineering practice



Regular inspections at the workshop pay for themselves quickly with high machine availability and reduced operating costs.



WIRTGEN GROUP

- Main Pavillon & Fan Shop
- Customer Service Pavillon

KLEEMANN

- Mobile Jaw Crushers
- Mobile Impact Crushers
- Mobile Cone Crushers
- Kleemann Technology Pavillon

WIRTGEN

- Cold Milling Machines
- Cold Recyclers & Soil Stabilizers, Binding Agent Spreaders
- Slipform Pavers
- Surface Miners
- Wirtgen Technology Pavillon

HAMM

- Single Drum Compactors
- Tandem Rollers
- Rubber Wheeled Rollers
- Compact Line
- Hamm Technology Pavillon

VÖGELE

- SUPER Series
- VISION Series
- Special Machinery
- Vögele Technology Pavillon

4 STRONG BRANDS, 75 PRODUCTS ON DISPLAY, 10 WORLD FIRSTS

PUBLISHER'S DETAILS

Highlights –
The Wirtgen Group bauma 2010
trade fair magazine

PUBLISHED BY

Wirtgen
Beteiligungsgesellschaft mbH
Reinhard-Wirtgen-Straße 2
D-53578 Windhagen
E-Mail: info@wirtgen.de
Internet: www.wirtgen-group.com

OFFICIAL REGISTRATION

Amtsgericht Montabaur
HRB 10492
USt.-ID Nr.: DE 149 525 751
Board of management:
Jürgen Wirtgen, Stefan Wirtgen,
Rainer Otto

Responsible for content

Claudia Fernus
Tel.: +49 2645-131 744
Fax: +49 2645-131 499
E-Mail: presse@wirtgen.de

All rights reserved. Reproduction only with written permission by the editorial staff.
This applies especially to duplication via copying or CD-ROM and storage in electronic databases.