

## SUPERIOR TECHNOLOGY. OPTIMAL COMPACTION.

ARTICULATED TANDEM ROLLERS, 5t AND OVER



### MILLIONS OF KILOMETRES BEAR OUR SIGNATURE.

You build the finest roads so we can all move forward faster. And to ensure that you can progress faster, we build the best machines. As a member of the leading international FAYAT group, we supply machines for all areas of road construction – from soil compactors to cold planers and recyclers, from asphalt rollers to road pavers. For over 60 years, the history of our company has been synonymous with the history of road construction.

With our accumulated know-how, we are an innovation driver that sets the pace for an entire industry. BOMAG has developed a huge number of technologies, from systems for measuring and controlling compaction, such as ECONOMIZER and ASPHALT MANAGER, to technologies for reducing operating costs, such as ECOMODE and the most effective screed heating in the market: MAGMALIFE. We offer solutions for a wide range of applications.

Our global network of experts and partners in over 120 countries is there to support you, from the configuration of the machines to providing solutions for the most challenging of tasks.

We owe our innovative strength to our more than 2,000 employees worldwide, their commitment and their unique wealth of experience. A source of know-how which has propelled us to worldwide market leadership in this sector. The reason for this is our unconditional commitment to quality: in product development and production, in the qualification of our employees, and in a service that guarantees optimal on-site support.





### ENHANCING PRODUCTIVITY.

#### ASPHALT COMPACTION WITH BOMAG EXPERTISE.

Better is the enemy of good. With this motto, BOMAG has developed, designed and built compaction equipment for the last 60 years. Our engineers strive to make each new model generation a little better, more economical and productive than the previous generation. And they always pursue one target: a BOMAG must be able to finish work quicker, more comfortably and professionally. The close contact we maintain with our customers helps us to find ways to achieve true increases in productivity, enabling you to complete your work perfectly and productively.

With ECONOMIZER, TanGO and ASPHALT MANAGER we have once again set new standards and demonstrated that real innovation always meets a need: not just what is technically feasible: practicality means progress.



and above, BOMAG tandem rollers are the first choice for many applications. With cab or ROPS, productivity and operating comfort is always there.

Trust in the expertise of our engineers and the strength of our sales and service network. Trust in proverbial BOMAG quality. Because at BOMAG we concentrate on just one target: enhancing your productivity.









### FIVE GOOD REASONS TO CHOOSE BOMAG.



#### **MAINTENANCE: FAST!**

Daily maintenance is essential and with EasyService all maintenance points can be readily reached from the ground. And without any grease nipples.



#### **ECONOMY: OUTSTANDING!**

ECOMODE provides load-dependent and economical working without high engine speeds. Giving excellent fuel economy and maximum efficiency on every type of road construction project.



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#### **VIBRATION IN TRIPLICATE!**

Only BOMAG tandem rollers offer you three vibration systems. With double vibration, TanGO and ASPHALT MANAGER you have three technologies to choose from.







#### THE DRIVER'S STATION: OPTIMISED!

BOMAG always considers the roller driver. His work place provides the best view and offers space and operating comfort at the highest level. This ensures good workmanship and efficiency.

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#### COMPACTION: RIGHT FIRST TIME!

Simple and reliable compaction thanks to ECONOMIZER and BCM. Unnecessary passes are avoided, compaction is accurately documented. Optimised compaction is so easy.



### YOUR CHOICE.

Each application is different – all construction sites come with new challenges. This is why the right philosophy is not what matters in asphalt compaction, but the right technology! With BOMAG you can choose how to match your operation and your work. We always have the right technology at hand for every application. And all from one source.



#### **OUR STANDARD: DOUBLE VIBRATION**

With two amplitudes and individually operable drums, this technology covers a wide range of applications on many projects. Proverbial BOMAG quality goes without saying and our equipment specs meet every requirement.

#### FOR SENSITIVE WORK: TanGO

Wherever careful compaction is required, TanGO oscillation from BOMAG is the answer. The high wear-resistant drums and a factory warranty of 8,000 operating hours always put you on the safe side.

#### NO MORE GUESSWORK: ASPHALT MANAGER.

Exclusively from BOMAG. This is a Manager that you really can trust. Dial-in the layer thickness and off you go. Everything is controlled and monitored by the ASPHALT MANAGER: material, degree of compaction, temperature, control of the direction of compaction. The driver just concentrates on the rolling pattern and converses with colleagues on interconnected rolling operations. Which manufacturer offers a choice of three vibration systems? BOMAG. Because BOMAG knows exactly what every contractor wants.

ASPHALT MANAGE

TECHNOLOGY

**UIBRATION** 

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### THE TECHNOLOGY FOR SENSITIVE ROLLING: TanGO.



TanGO is the answer when sensitive compaction is needed:

#### SIMPLE TO USE

TanGO compacts risk-free e.g. on seams (hot to cold), on bridges or near buildings. And even better, TanGO is simple to operate: it comes with only one amplitude, which is optimised for all applications.

#### **ALWAYS CAREFUL**

BOMAG tandem rollers with TanGO always compact with care. The drum cannot bounce, because TanGO always works obliquely to the surface. This has two advantages: on one hand there is no crushing of aggregate; on the other hand no bow waves are created, even when working at higher working speeds. The TanGO drum is in the rear of the machine, so the front vibrating drum can be used for thicker layers or stiffer mixes.

#### THE CONCEPT

TanGO compaction uses two exciter shafts rotating in the same direction, so that a torque is generated around the drum axis. The drum quickly keeps alternating its effective direction tangentially to the contact surface (forwards and backwards). The mat is actually compacted with double frequency.



tandem rollers with TanGO oscillation. Careful compaction on seams & bridges.

#### **HIGHEST QUALITY**

Others talk about quality. BOMAG guarantees quality: the TanGO drum is made of highly wear-resistant fine grain steel. So BOMAG can guarantee a lifetime of at least 8,000 hours. Others can only be amazed ...







Compared with conventional oscillation rollers, TanGO consumes 1.1 l/h less fuel. Because BOMAG makes such good use of physics, the unbalanced masses are arranged towards the outside, reducing inertia forces and requiring less energy.

### **ASPHALT MANAGER: INTELLIGENT, FLEXIBLE COMPACTION.**



Exclusively from BOMAG: Only with ASPHALT MANAGER is amplitude infinitely adjustable and automatically controlled. You can't compact in any simpler way or more reliably. The electronic system measures material stiffness and adapts amplitude to the material and the pre-selected layer thickness.

Changing sites. Changing surfacing. Changing crews. The ASPHALT MANAGER (AM) was developed by BOMAG to ease daily work, because each driver can at any time and on any material achieve optimum and, above all, economical compaction results.

At the same time, AM is easy to operate: the operator simply selects the layer thickness, the rest is regulated by AM. No other system is as flexible as AM: with the variable amplitude output can be powerful or sensitive. The right level of force is introduced in the right direction on any application: as powerful as possible, or as carefully as necessary. Fast compaction progress is achieved on even difficult to compact materials.

#### SPEED AND LESS COST

With AM you require fewer passes and save time and fuel. At the end of compaction when asphalt has cooled down, the amplitude is reduced, so the roller automatically prevents aggregate crushing. All parameters (stiffness, amplitude, temperature) and the end of compaction are continuously displayed to the driver. For work in sensitive areas, such as on bridges or seams, the amplitude can be restricted manually.

ALT MANAGER

ECHNOLOGY

Also unique: AM automatically matches the direction of vibration to the travel direction. This prevents the formation of ripples, because no bow wave is generated. At standstill AM automatically switches over to horizontal vibration. This prevents the drums sinking in and at the same time, offers short response times when starting forward.









The clearly structured display: all values always perfectly in sight. Layer thickness pre-selection at a touch of a button.

### **SAVING WITH EVERY PASS.**

*Fuel costs are one of the major items in the calculation of operating costs for any machine, because over its lifetime, in most cases, they will exceed the purchasing price. BOMAG engineers have addressed this with BOMAG ECOMODE, an energy efficiency system, which saves several thousand litres of fuel per year – every year. This reduces the operating costs and aids the environment.* 





#### THE ADVANTAGES:

- Load-dependent engine speed control saves up to 30% fuel
- Less noise eases stress on the driver and environment
- Idle speed shut-down reduces wear and operating costs and increases resale values

#### SMART CONTROL.

Conventional rollers always work with full engine speed to reach vibration frequency. BOMAG ECOMODE controls the engine in relation to load to give the exact actual power needed. The vibration frequency is maintained at a constant level by infinitely adjusting the hydraulic components. This keeps the overall system within the optimum power range and fuel consumption is reduced, without losing power and productivity. A positive side effect: with reduced speed the machine works more quietly. This is not only beneficial for the crew on site, it has a positive effect on acceptability of urban projects.

#### SMART SHUT DOWN.

BOMAG ECOSTOP shuts the engine down after a defined period of time at idle speed with consideration for parameters like temperature, battery, etc. Unnecessary fuel consumption is avoided and the operating hour meter stays low.

#### **ENVIRONMENTAL PROTECTION AS STANDARD.**

Depending on the power, stage particulate filters and SCR-catalyst are used to reduce pollutants. Maintenance is minor, because the filter regenerates automatically during operation. No action is required from the driver. In models with SCR- catalyst, the tank capacity for the additive (AdBlue<sup>®</sup>) is rated so that it only needs to be replenished about every third refuelling.

### **WAIT NO LONGER!**

BOMAG tandem rollers are efficient to service because the easiest and most cost effective service is one that is not necessary. So BOMAG tandem rollers don't need a single grease nipple.

BOMAG engineers always have practical use in mind. Experience has shown that the BOMAG EasyService concept with no grease nipples maximizes reliability. Special bearings with hermetic sealing and a permanent high-quality grease filling guarantee reliable lifetime lubrication. And, another side effect, the machine stays clean.

BOMAG EasyService also means easy access to all maintenance points, which can be comfortably reached from the ground. The single-unit hood made of composite material with strong gas springs swings up readily and reveals the entire engine compartment. All fluids can be reliably and neatly drained through external drains.



Easy refilling with a folding step.



### **GOOD WORKMANSHIP IS MEASURABLE.**

When has the right compaction for the material been reached? Only someone who knows the degree of compaction can make the right decision. Nowadays no one has the time and money to spend on unnecessary passes. BOMAG is a pioneer in measuring technology for compaction, which helps many operators to achieve optimum compaction results while still saving time and money. Minimum passes for maximum compaction.

### A BOMAG DRIVER KNOWS WHEN COMPACTION IS FINISHED.

Unique in compaction technology: the ECONOMIZER from BOMAG, integrated in the central display, helps the driver achieve optimum compaction results. Operation is very simple because no activation or calibration is required. The ECONOMIZER automatically determines the compaction progress. A lighting strip informs the driver of the end of compaction, and avoids over-compaction. A warning light additionally indicates any risk of over-compaction. Also, the driver is informed about the optimum speed to use.

#### COMPACTION IS ACCURATELY DOCUMENTED WITH BCM: BOMAG COMPACTION MANAGEMENT

Many public tenders today ask for complete documentation of all works. BOMAG BCM (BOMAG Compaction Management) helps you to provide dependable documentation of the entire compaction process: a robust tablet PC in the cab and the BOMAG StarFire GPSreceiver are part of the BCM. Based on the GPS-data, the system generates continuous compaction charts in real-time.



#### **THREE MODELS TO CHOOSE FROM:**

#### **BCM** start

The driver is informed about the number of passes and the asphalt temperature. With a freely definable colour scale he immediately sees where further passes are required. Once compaction is finished, the compacted area appears in green and the driver can be sure that every area has been compacted. All data saved can be passed to the client or monitoring body as a pdf-file. BCM start is a convenient Plug&Play solution also for mixed fleets.

#### BCM 05

With BCM 05 the stiffness values " $E_{VIB}$ " in MN/m<sup>2</sup> measured by the ASPHALT MANAGER are additionally documented. The  $E_{VIB}$ -value correlates with the asphalt density. This enables accurate weak spot analysis and the reduction of other test methods. With

BCM 05 the BOMAG ASPHALT MANAGER becomes a real tool for quality assurance.

#### BCM net

Asphalt rollers often work in interconnected operations. With BCM net rollers are cross-linked with each other. Each driver is able to see the passes, temperatures and  $E_{VIB}$ -values (with AM) of all machines in different colours in real-time. This optimizes the rolling patterns, even if one roller is e.g. filling water tanks. With BCM net all data is saved for later evaluation. And machines from different manufacturers can be integrated.

Reliable and effective documentation provides evidence of all work performed. BOMAG has these answers, because BOMAG knows how sites operate.



ECONOMIZER knows when full compaction is reached: The lighting strip shows the degree of compaction and warns of over-compaction.



With BCM net drivers have all cross-linked machines in sight. Drivers know where additional passes are required.



#### **YOUR ADVANTAGES:**

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- Extra large cab area: more space for the operator means safe and comfortable working
- The cab is not mounted on the drive unit: no loads caused by heat, exhaust fumes and vibrations. The driver remains comfortable and fresh for longer shifts.

### **SPACE TO WORK BETTER.**

Any machine is only as good as its driver. In any BOMAG tandem roller the driver can feel at home. And satisfied drivers are more productive.

#### **EXCELLENT VISION.**

The smart design of BOMAG tandem rollers with sliding seat and folding window always gives an unobstructed view of the drum edges. The driver can work along walls without risk because no parts of the cab or roller project over the sides. He can also keep an eye on the sprinkling system and, with the optional outside mirrors, he has unrestricted all-round vision.

#### EXTRA SPACE.

The ample space ensures stress-free work, even over longer working days. The powerful heating, also optionally with air conditioning, provides comfortable temperatures and condensation-free windscreens. On BOMAG rollers, engine and cab are separated. The driver is not troubled by cab vibration, noise, heat or exhaust fumes.

#### **ERGONOMIC CONTROL.**

The seat unit with steering wheel, operating arm rest and instruments can be moved across the full width of the cab. And the suspended seat with integrated travel lever can be swivelled by  $75^{\circ}$  or  $15^{\circ}$  to the left or right. This gives the driver optimum seat positioning at all times to operate the roller reliably and intuitively. BOMAG's attention to detail also shows here: the cab floor is completely flat and without openings for easy cleaning.

#### NO CONFUSION.

Safe operation even with different drivers: The selfexplanatory operation is distinctly marked and the switch setting is always clearly identifiable. The displays indicate the operating status of the machine with clear symbols.



The folding window and sliding seat offers more comfort.



The driver has ample storage space in the cabin.



The driver always has all the essential displays safely in view. Operating the switches is simple and quickly becomes second nature.

### THE DETAIL MAKES THE DIFFERENCE.

Many people build rollers. But only BOMAG build BOMAG rollers. We pay full attention to the small details, to make your work easier. Our engineers are where the action is, to learn from site practice. This knowledge can be found in all of our rollers. Well thought-out, with the highest quality and reliability. Because only BOMAG is BOMAG.





#### **CLEAN DRUMS.**

Spring loaded, folding polyurethane contact scrapers ensure clean drums and optimum distribution of sprinkled water.

#### SHIELDED ELECTRICS.

For reliable current flow with no spark risk, all wiring looms are routed through nylon hoses. The central electrical system is installed in the cab, protected against water and dirt.



#### QUICK TRANSPORT.

Quick relocation off-site because the lashing eyes are amply dimensioned and easily accessible. The articulation lock is easy to operate.



#### **PERFECT SPRINKLERS.**

The drum sprinkling system works with two independent pumps. With a high number of nozzles per working width and a filler strainer, the wind protected system and the perfect view of the nozzles maximizes reliability and performance. The interval function reduces water consumption. The low siting of the water tanks enhances driving stability and tank drainage is simple and quick.

#### ON A WIDE TRACK.

For work along edges and to increase the working width, the optional crabwalk feature is used to offset drums by up to 170 mm on either side



#### **EFFECTIVE FUEL FILTERING.**

The two-stage fuel filter with water separator and service indicator ensures reliable fuel flow. The air filter has two filter cartridges as standard and twostage mechanical separation. This reduces maintenance and enhances reliability.





#### SAFE WORK AT NIGHT.

Night-work sites are no longer an exception. A total of eight halogen spotlights on the frame and roof bring daylight to the working area. Optional FlatBeam LEDlamps perfectly illuminate the lateral work areas and enhance comfort and safety. Drum illumination is also available on request.

### **NEED A LITTLE MORE – OPTIONS.**

Standard BOMAG tandem rollers are already well equipped for versatile and demanding use. However, BOMAG offers a wide range of optional equipment for all applications and service kits which ease work and guarantee the renowned BOMAG long-life and reliability. Please ask your BOMAG Sales Partner. He will be pleased to advise you.



#### FOR THAT EXTRA PERFORMANCE.

The BOMAG BW 154 is equipped with two split drums, so scuffing surfacing when cornering is avoided. For work under confined conditions the BOMAG BW 154 impresses with a perfect surface finish.



#### A CLEVER COMBINATION.

The kneading effect of combination rollers ensures optimum sealing of the surface. Particularly on mixes sensitive to scuffing, this model with rear rubber tyres, provides uniform compaction. The optional aprons allow the asphalt temperature to be maintained for longer periods of time.



#### CLEAN EDGES.

The edge cutter can be equipped with tools for cutting and compressing and is readily operated with the travel lever.



#### **EVENLY SPREAD.**

Only the unique, patented BOMAG chip spreaders produce a uniform spread pattern with exactly defined widths. The spreader is mounted and dismounted quickly and easily via quick release couplings. The spreader is optionally available with +/- 20 cm lateral offset.



#### KNOW WHAT IS GOING ON WITH BOMAG TELEMATIC.

With BOMAG TELEMATIC any machine is only a mouse click away. Retrieve location and operating data at any time and manage your fleet more efficiently. Automatic reports provide full transparency on consumption, idle times and potential for fleet optimization. Real-time illustration of total service planning and history comes with BOMAG TELEMATIC. The machine will report by e-mail, if required. Downtimes are avoided. Only BOMAG TELEMATIC delivers data also to your existing IT-technology and brings together data from different sources. No logging-on to different systems. BOMAG TELEMATIC is the solution for your entire fleet.



#### ALL YOU NEED IN AN EMERGENCY.

To be able to perform regular services quickly and efficiently, BOMAG offers original spare parts kits individually configured for every machine. You save time and always know that you are using the correct spares and service parts.



#### AVAILABLE WHEN YOU NEED IT: BOMAG SERVICE.

BOMAG service is always available and near to you. With our service hotline you can reach BOMAG service staff for help with questions about machines and spare parts supply. We promise.

#### **BOMAG PARTNERSHIP PROGRAM**

Enjoy additional security with flexible and individual BOMAG service agreements. Check out our service modules to find the best combination of service, full service and extended warranty agreements. Reduce repair risks and protect against unforeseeable costs. Increase reliability in use, the lifetime of the machine and resale values.

### **MODEL OVERVIEW.**



The BW 141 AD displays its compact operating capability in haul road construction.



Robust even under extreme climatic conditions: BW 141 AD with TIER2 engine in Dubai.



The BW 141 ADO with TanGO and chip spreader covers a wide range of applications.



BW 191 with its wide drums is ideal for high volume output and static rolling



Model types	Working width [mm]	Drum diameter [mm]	Operating weight approx. [t]*
BW 141	1,500	1,100	6.9
BW 151	1,680	1,100	7.6
BW 154	1,680	1,100	8.3
BW 161	1,680	1,220	10.0
BW 190	2,000	1,220	12.0
BW 191	2,000	1,400	13.5
BW 202	2,135	1,220	12.3
BW 206	2,135	1,400	Max. 16.0

\*) Operating weights with cab and basic equipment. Actual operating weight is dependent on equipment and accessories. Technical modifications reserved. Machines may be shown with options.



### **PERFECTION IS NO COINCIDENCE.**

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Every BOMAG roller embodies our total expertise. Down to the smallest detail. So that you can put all your experience to work. The result: visible success. Every time.

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