

The new BMW R 1300 RT.

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1. Overall concept. Short version.



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The background of the motif was edited using AI.

"With the new BMW R 1300 RT, we've taken the touring icon from BMW Motorrad to a whole new level. It is lighter in design, more accessible and more dynamic than ever before. In addition, with a completely new engine, chassis and aerodynamics, it offers a riding experience that meets the highest demands in this segment in terms of dynamics, comfort and travel capability".

Harald Spagl, Project Manager BMW R 1300 RT

The new BMW R 1300 RT: Wider range from comfortable tourer to dynamic country road motorcycle. Dynamic design language with optimised wind and weather protection.

The new BMW R 1300 RT follows in the footsteps of its highly successful predecessor. It continues to build on the proven qualities of the BMW RT, such as touring capability and riding comfort - alone, as a pair or with plenty of luggage.

At the same time, the new R 1300 RT has broadened its usage profile by making its dynamic systems even more prominent. Sporty optional equipment such as the sport brake, the enhanced Shift Assistant Pro and the newly developed DCA electronic suspension allow an even more active and dynamic riding style. The range of optional extras is complemented by the Automated Shift Assistant ASA, which can be ridden in a sporty and dynamic manual mode, but also allows comfortable riding in automatic mode. All this, combined with a more dynamic and visually lighter design, promises to continue the success story of the BMW RT.

The wind and weather protection concept of the new R 1300 RT includes adjustable side trim that is homogeneously integrated into the design. This makes it possible to provide the rider with an adequate supply of fresh air at all times, even in challenging conditions such as city traffic or high outside temperatures on country roads, and to offer highly effective protection from the wind and weather at low temperatures when riding on the highway or motorway.

In addition to the basic version in Alpine White 3 uni colour, the new BMW R 1300 RT is available in the Triple Black model variant in Blackstorm metallic, the emphatically dynamic Impulse model variant in Racing Blue metallic and the particularly elegant model variant Option 719 Camargue in Blue Ridge Mountain metallic.

Perfect ergonomics and equipment for comfortable and dynamic travelling and touring.

The BMW R 1300 RT's design, engine and chassis are not the only aspects of the BMW touring icon that reflect the BMW Motorrad development team's ambition to expand the range of possible uses of the new BMW R 1300 RT and make it even more dynamic. Equal importance was also placed on ergonomics, with a focus on creating a more active riding position.

Accordingly, the ergonomic triangle formed by handlebars, footrests and seat on the new R 1300 RT have been designed to position the rider noticeably further forward. This results in improved feedback from the front section and therefore even greater controllability during dynamic riding. At the same time, the more active seating position still allows for relaxed touring and cruising, even with a passenger. The height and angle of the rider's seat can be adjusted to fine-tune the riding position. Passenger comfort has also been significantly improved. The new cases now offer more space for the passenger's lower legs without compromising the volume of the cases. The passenger seat has also been lengthened. There is now more space to change your seating position from time to time on longer trips.

A choice of different seat heights for optimum riding comfort and a new luggage system with electric cases and topcase.

Additional variable-volume case system for optimum customisation.

As usual, BMW Motorrad's engineers have paid particular attention to easy access and a low seat height. For this reason, the development of the new R 1300 RT placed particular focus on achieving a seat height of only 780 mm. The inner leg curve is also significantly smaller than on the previous model. In addition to the standard seat, other seats are available as individual items of optional equipment ex works.

The new BMW R 1300 RT is equipped as standard with cases (27 litres each) for touring and holiday trips. Further highlights of the new R 1300 RT are the Vario cases, available ex works for the first time as an optional equipment for a BMW RT. The variable luggage system allows the volume to be adjusted from 27 to 33 litres to suit the width of the motorcycle. Both cases are electrified and can be unlocked using the central locking system. They also both feature interior lighting, and the left-hand case includes a USB-C charging port. The two topcases with a capacity of 39 and 54 litres respectively offer additional storage space. The large 54-litre luggage compartment is also electric. A special feature is the heated backrest for the passenger.

Rugged boxer engine with top figures for power output and torque along with optimised running smoothness and efficiency.

The boxer engine in the new BMW R 1300 RT has a capacity of exactly 1,300 cc while the ratio between bore and stroke is 106.5 to 73 mm (predecessor: 102.5 to 76 mm). This increase in capacity derives from an enlarged cylinder bore and a new crankshaft with reduced stroke. It has an output of 107 kW (145 hp) (predecessor: 100 kW (136 hp), still at 7,750 rpm, and develops a maximum torque of 149 Nm at 6,000 rpm (predecessor: 143 Nm at 6,250 rpm), making it by far the most powerful serial production BMW boxer engine to date. Its maximum engine speed is 9,000 rpm.

Three riding modes are included as standard, allowing the bike to adapt ideally to any road conditions. Riding Modes Pro with the additional modes "Dynamic" and "Dynamic Pro", along with riding mode pre-selection as optional equipment ex works. Engine drag torque control (MSR) as standard.

In standard trim, the new R 1300 RT has three riding modes for adaptation to individual rider preferences. The "Rain" and "Road" riding modes allow riding characteristics to be adapted to most road conditions. The "Eco" riding mode also makes it possible to use the innovative BMW ShiftCam technology primarily in such a way that the maximum range can be achieved with a single tank of fuel. On request the new R 1300 RT can also be fitted with the optional equipment item "Riding Modes Pro" ex works: among other things, this comprises the additional riding modes "Dynamic" and "Dynamic Pro". With the riding mode pre-selection the rider can use the riding mode button to make an individual selection. In this way, a preferred and easily manageable number of riding modes can be configured and selected while riding.

Engine drag torque control (MSR) is on board even in standard trim. This can be used to safely avoid unstable riding conditions that can occur during coasting or downshifting due to excessive brake slip at the rear wheel. In these cases, the engine drag control instantly opens the throttle valves to such an extent that drag torque is equalised and the motorcycle stabilises.

Automated Shift Assistant (ASA) with fully automated clutch operation and manual or automated shifting for an enhanced motorcycling experience as optional equipment.

With the Automated Shift Assistant (ASA), BMW Motorrad offers an innovative technical solution to make motorcycling easier and more comfortable. True to the motto "Simplify your Ride", automated clutch operation and gear changes puts the riding experience even more front and centre - without sacrificing the dynamics of the shifting process.

Completely newly developed chassis with sheet metal main frame made of steel and aluminium rear frame.

The chassis of the new BMW R 1300 RT has been completely redesigned. The centrepiece is the new sheet metal main frame made of steel, which in addition to a significant optimisation of the

installation space for even more compact packaging also offers higher levels of stiffness than the predecessor model. In the course of the redesign, the rear frame was also completely reconceived. In place of the previous tubular steel construction, the new R 1300 RT now has an aluminium lattice tube rear frame.

In combination with a drive unit that is now much more compact, the new design of the chassis achieved a significant concentration of mass towards the overall centre of gravity, which is reflected in noticeable handling benefits. At the same time, the new R 1300 RT is even more precise and stable when braking, requires noticeably less effort to ride, and offers an even more satisfyingly precise response of the suspension elements.

The best of both worlds: EVO Telelever front wheel guide with flex element and new EVO Paralever rear wheel guide for even greater steering precision and ride stability. New wheels more than 1.4 kg lighter.

The front wheel guide in the new R 1300 RT follows the Telelever principle introduced by BMW Motorrad 30 years ago - but in an innovative, newly designed form that combines the best of both worlds.

With the Evo Telelever, BMW Motorrad now combines the strengths of the two previously used Telelever variants in the new BMW R 1300 RT. Clamped tightly to the fork tubes - as previously in the sporty design - the upper fork construction (as in the GS) incorporates a handlebar decoupling system that prevents any detrimental tilting movement and only transmits steering forces.

The rear wheel guide of the new R 1300 RT has also been redesigned. The hallmark of the Evo Paralever is a significantly stiffer connection via the suspension in the frame and a continuous swinging arm quick-release axle.

The new R 1300 RT features new 17-inch aluminium cast wheels with hollow-spoke design. All in all they weigh in at more than 1.4 kg less than the existing wheels.

New electronic suspension Dynamic Chassis Adaption (DCA) for two rider-selectable riding positions for maximum spread between ride comfort and dynamic handling as well as with dynamic adjustment of damping, spring rate and load equalisation as optional equipment ex works.

Even the standard Dynamic ESA electronic chassis offers a high level of riding safety and riding enjoyment on a wide variety of road surfaces thanks to dynamic adjustment of the damping and load-dependent adjustment of the rear spring preload.

The electronic Dynamic Chassis Adaption (DCA) now goes one step further and, in addition to the familiar Dynamic Suspension Adjustment (DSA) options - such as dynamic adjustment of damping, spring rate and load equalisation - offers two rider-selectable riding positions via the riding modes for maximum spread between ride comfort and dynamic handling. This makes for an even more thrilling riding experience in all conditions.

DCA has been developed with equal emphasis on dynamic performance and comfort. The new semi-active chassis offers two different riding positions. One riding position has a flat steering head angle and therefore a chassis geometry designed to maximise riding stability and smoothness. The second riding position features firmer damping tuning, a higher spring rate and a higher ride height. Raising the rear end more than the front results in a steeper steering head angle and reduced castor, making the motorcycle easier to steer and handle. DCA makes these two different chassis geometries possible and combines them with the riding modes.

A high-performance braking system in conjunction with Integral ABS Pro comes as standard. Sport brake as optional equipment ex works.

The R 1300 RT comes as standard with a twin disc brake featuring two radially mounted four-piston fixed callipers at the front and a single disc brake with two-piston floating calliper at the rear in conjunction with BMW Motorrad Integral ABS Pro. The new BMW R 1300 RT can be fitted with the sport brake system as optional equipment ex works. In addition to a sportier look with titanium-coloured brake callipers, it offers a slight increase in braking performance.

New full LED headlights and state-of-the-art LED light units feature all round. Headlight Pro with adaptive headlight and pitch compensation as well as adaptive light modes with intelligent adjustment of the alignment and intensity of the low beam to different riding situations are available as optional equipment ex works.

For decades now, BMW Motorrad has been regarded as a frontrunner when it comes to safety in connection with motorcycling. Accordingly, the new R 1300 RT comes with state-of-the-art LED light units all around as standard. The new full LED headlamp which illuminates the road with unrivalled brightness and clarity, underlines the prestige of the new R 1300 RT. The light unit consists of an LED module with multiple LEDs for low beam and high beam. The daytime running light or position light icon (depending on the market), which is positioned to the left and right of the headlamp, provides a distinctive look.

Headlight Pro goes one step further available as optional equipment ex works. In addition to the adaptive headlight, the headlamp of the new R 1300 RT also features pitch compensation - for example when accelerating and decelerating as well as for levelling the riding position in DCA. Headlight Pro features a servomotor that automatically and actively adjusts the position of the cut-off line to keep the vertical inclination within the optimum range when the load or load status changes.

Headlight Pro can be further enhanced with the optional "Adaptive Light Modes" (depending on market), which offer lighting technology that intelligently adapts the direction and intensity of the low beam to different riding situations. The Adaptive Lighting Modes provide optimum lighting conditions for night-time riding with speed-dependent road illumination. Lighting is provided in several stages: for low, medium and high speeds. Intelligent adaptation to speed and riding conditions increases safety and helps to guide the rider.

Riding Assistant with Active Cruise Control (ACC), Front Collision Warning (FCW), Lane Change Warning (SWW) and Rear End Collision Warning (RECW) for convenient and safe motorcycling as optional equipment ex works.

The new R 1300 RT is already equipped with Dynamic Cruise Control (DCC) with braking function as standard. The Riding

Assistant offers many more functions as an optional extra ex works. It consists of Active Cruise Control (ACC), Front Collision Warning (FCW), Lane Change Warning (SWW) and Rear End Collision Warning (RECW).

10.25-inch TFT colour display with map navigation, a wide range of functions and new Connectivity Hub for controlling accessories as well as actively ventilated smartphone charging compartment with USB-C charging port as standard.

The R 1300 RT comes fitted as standard with a 10.25-inch TFT colour screen with integrated map navigation and newly developed Connectivity Hub. With maximum connectivity, excellent readability, clear menu navigation and a highly integrated operating concept, the new R 1300 RT maintains its leading position among production motorcycles.

The "tiles" shown can be used to select the "My Motorcycle", "Radio", "Navigation", "Media", "Phone" and "Settings" menus. A new feature is the Connectivity Hub "tile" for connecting current and future accessories such as smart glasses, heated vests and lightweight jackets. This simplifies the operation of the accessories.

The new R 1300 RT comes as standard with an actively ventilated smartphone charging compartment located within the rider's reach. It is even easier to open than its predecessor and can accommodate much larger smartphones. The smartphone battery is charged via a USB-C interface. The lid also has a clip that can be used for a debit card or banknotes.

Audio System and Audio Pro available as optional extras ex-works for outstanding sound.

With the Audio System, the new R 1300 RT offers an even more intense sound experience. It features a high level of integration with the vehicle's electrical system. The menu control, setting options and unique display concept make the audio experience perfect in terms of interaction as well. In addition to the loudspeakers, a connected communication system can also be used for playback.

Audio Pro offers an even more impressive sound experience. Ordered as optional equipment to the audio system, it features higher quality loudspeakers with separate tweeter/midrange and woofer control for extra powerful, crystal-clear sound. A choice of

sound profiles and dynamic volume control ensure optimum listening pleasure in every riding situation. Audio Pro is also a visual highlight. A silver perforated grille without fleece provides a clear view of the speakers with their gold dust protection dome.

Optional equipment and Original BMW Motorrad Accessories for the new BMW R 1300 RT.

An extensive programme of optional equipment and optional accessories is available for further customisation of the new BMW R 1300 RT.

The highlights of the new BMW R 1300 RT:

- Lightweight, dynamic design.
- Optimised ergonomics and accessibility for dynamic riding and confident touring.
- Wind and weather protection concept with side trim integrated into the design.
- High windshield available as optional equipment ex works.
- Four model variants: Basic variant, Triple Black, Impulse and Option 719 Camargue.
- 2-cylinder boxer engine with 107 kW (145 hp) at 7,750 rpm and 149 Nm at 6,500 rpm.
- A range of seat variants ensures an optimum seat height, while a newly developed luggage system with electrified cases, topcase and Vario cases makes the bike ideal for comfortable touring and travelling.
- Three riding modes are included as standard, allowing the bike to adapt ideally to any road conditions.
- Riding Modes Pro with the additional modes "Dynamic" and "Dynamic Pro", along with riding mode pre-selection as optional equipment ex works.
- Engine drag torque control (MSR) as standard.
- Automated Shift Assistant (ASA) with fully automated clutch operation and manual or automated shifting for an enhanced motorcycling experience as optional equipment.

- Completely newly developed chassis with sheet metal main frame made of steel and aluminium tube lattice rear frame.
- EVO Telelever with flex element and EVO Paralever rear wheel guide for even greater steering precision and ride stability.
- Dynamic ESA electronic suspension as standard.
- New electronic suspension Dynamic Chassis Adaption (DCA) for two different riding positions for maximum spread between ride comfort and dynamic handling as well as with dynamic adjustment of damping, spring rate and load equalisation as optional equipment ex works.
- New wheels more than 1.4 kg lighter.
- High-performance brake system in conjunction with BMW Motorrad ABS Pro for safe braking, even when leaning into corners.
- New full LED headlamp as standard. Headlight Pro with adaptive headlight as optional equipment ex works.
- Adaptive Light Modes for Headlight Pro headlamp as optional equipment ex works.
- Riding Assistant with Active Cruise Control (ACC), Front Collision Warning (FCW), Rear End Collision Warning (RECW) and Lane Change Warning (SWW) for convenient and safe motorcycling as optional equipment ex works.
- Audio Pro as optional equipment ex works.
- Comfort Passenger Package as optional equipment ex works.
- Optional equipment and Original BMW Motorrad Accessories.

2. Design and ergonomics.



"When designing the new BMW R 1300 RT, we were able to achieve a significantly lighter and more dynamic appearance by reducing the visual mass of the motorcycle. The high degree of transparency in the front area is largely responsible for the lighter appearance of the bike and at the same time improves the real benefit in the form of a better overview of the rider's immediate surroundings."

Matthias Kottmann, Vehicle Designer BMW R 1300 RT

The new BMW R 1300 RT: Wider range from comfortable tourer to dynamic country road bike. Dynamic design language with optimised wind and weather protection.

The new BMW R 1300 RT follows in the footsteps of its highly successful predecessor. It continues to build on the proven qualities of the BMW RT, such as touring capability and riding comfort - alone, as a pair and with plenty of luggage. This touring and comfort expertise is further enhanced in the new R 1300 RT, for example, by the Comfort Passenger Package, which raises touring suitability for two to an unprecedented level. In addition to heated seats, the Comfort Passenger Package includes heated grips and a heated backrest for the passenger. Finally, the new R 1300 RT is available for the first time with an electrically operated Vario luggage system, which gives the motorcycle a slimmer appearance and ensures that only the necessary width is moved at any given time, providing benefits in city traffic and in terms of fuel consumption.

At the same time, the new R 1300 RT offers a broader usage profile by emphasising its sporty and dynamic features. Optional equipment such as the sport brake, the advanced Shift Assistant Pro and the all-new DCA electronic suspension allow for an even more active and dynamic riding style. The range of optional extras is complemented by the Automated Shift Assistant ASA, which can be operated in manual mode but also allows comfortable travelling in automatic mode. All this, combined with a more dynamic and visually lighter design, promises to continue the success story of the BMW RT.

Thanks to a flat tank ramp, the dynamic flyline is continued in a single line across the reduced front trim with the striking, airy light icons as a characteristic BMW signature. The proportion of painted trim that rises towards the front of the motorcycle emphasises the expression of a strong, enduring long-distance runner. In addition, the design of the luggage, topcase and seats has been integrated more closely into the vehicle, particularly with regard to the rider's position.

The wind and weather protection concept of the new R 1300 RT includes adjustable side trim that is homogeneously integrated into the design. This makes it possible to provide the rider with an adequate supply of fresh air at all times, even in challenging conditions such as city traffic or high outside temperatures on country roads, and to offer highly effective protection from the wind and weather at low temperatures when riding on the highway or motorway. Variable wind deflectors are also available as optional equipment ex works.

To further enhance the new R 1300 RT's weather protection, attention has also been paid to dirt and soiling in the foot area. A cylinder fairing, geometrically identical to the carbon-fibre cylinder guard, now adjusts the airflow to keep the heel significantly drier than on the previous model.

The model variants of the new BMW R 1300 RT.

Basic version.

- Alpine white 3 uni colour.
- Rear silencer standard (brushed stainless steel).
- Manifold standard (polished stainless steel).
- Tubular handlebars.
- Fuel tank painted (Mineral Grey metallic matt).

Triple Black model variant.

- Blackstorm metallic colour.
- Exhaust system, dark chrome-plated.
- Sport windshield.
- Forged handlebars.
- Fuel tank painted.

Alternative package contents:

- Tubular handlebars.

- Chrome-plated exhaust system.
- Aluminium fuel tank (tinted clear coat).
- Windshield, high.

Impulse model variant.

- Racingblue metallic colour.
- Exhaust system, dark chrome-plated.
- Forged handlebars.
- Variable wind deflectors.
- Design option wheels.
- Natural brushed aluminium fuel tank.

Alternative package contents:

- Tubular handlebars.
- Chrome-plated exhaust system.
- Aluminium fuel tank (tinted clear coat).

Option 719 Camargue model variant.

- Blue Ridge Mountain metallic colour.
- Lines painted by hand (at the Berlin plant).
- Chrome-plated exhaust system.
- Forged handlebars.
- Variable wind deflectors.
- Option 719 Wheel Sport.
- Shadow milled parts package.
- Fuel tank painted.

Alternative package contents:

- Tubular handlebars.
- Exhaust system, dark chrome-plated.
- Aluminium fuel tank (tinted clear coat).

Perfect ergonomics and equipment for comfortable and dynamic travelling and touring.

The BMW R 1300 RT's design, engine and chassis are not the only aspects of the BMW touring icon that reflect the BMW Motorrad development team's ambition to expand the range of possible uses of the new BMW R 1300 RT and make it even more dynamic.

Equal importance was also placed on ergonomics with a focus on creating a more active riding position.

Accordingly, the ergonomic triangle formed by handlebars, footrests and seat on the new R 1300 RT have been designed to position the rider noticeably further forward. This results in

improved feedback from the front section and therefore even greater controllability during dynamic riding. At the same time, the more active seating position still allows for relaxed touring and cruising, even with a passenger.

To achieve a compromise between an active riding position and suitability for long distances, the position of the footrests in relation to the seat has been retained from the previous model - the hip and knee angles were already excellent. However, the handlebar position has changed. It is now further forward, bringing the upper body closer to the front wheel. The handlebars are also slightly wider and less swept back. This puts the elbows in a more active position and gives the rider a better feel for the bike.

The height and angle of the rider's seat can be adjusted to fine-tune the riding position. It is possible to adjust the seat height by 20 mm or to tilt the seat. Tilting the seat affects the angle of the pelvis and can therefore contribute to the rider's comfort and activity.

Passenger comfort has also been significantly improved. The new cases now offer more space for the passenger's lower legs without compromising the volume of the cases. The passenger seat has also been lengthened. There is now more space to change your seating position from time to time on longer trips.

The handlebar variants available as optional equipment and as Original BMW Motorrad Accessories as well as the adjustable footrest system enable further customised ergonomic adjustments.

A choice of different seat heights for optimum riding comfort and a new luggage system with electric cases and topcase. Additional variable-volume case system for optimum customisation.

As usual, BMW Motorrad's engineers have paid particular attention to easy access and a low seat height. For this reason, the development of the new R 1300 RT placed particular focus on achieving a minimum seat height of only 780 mm. In addition to the standard seat, the following are available as single optional extras ex works.

- Comfort rider's seat (with seat heating).
- Comfort rider's seat, low (with seat heating).

- Comfort rider's seat, high (with seat heating).
- Comfort passenger's seat (with seat heating).

The new BMW R 1300 RT comes as standard with cases (27 litres each) for touring and holidays. Further highlights of the new R 1300 RT are the Vario cases, available ex works for the first time as optional equipment for a BMW RT. The variable luggage system allows the volume of the cases to be adjusted from 27 to 33 litres, so that the width of the vehicle can be adapted to suit the rider's needs, providing advantages in city traffic and in terms of fuel consumption. Both are electrified and can be unlocked using the central locking system. They also both feature interior lighting, and the left-hand case includes a USB-C charging port. The two topcases with a capacity of 39 and 54 litres respectively offer additional storage space. The large 54-litre luggage compartment is also electric. A special feature is the heated backrest for the passenger.

3. Drive.



"With significantly more power and torque than its predecessor, the boxer engine of the new BMW R 1300 RT is the perfect partner for sporty, dynamic touring and travelling."

Andreas Kowitz, Vehicle Concept Manager BMW R 1300 RT

Rugged boxer engine with top figures for power output and torque along with optimised running smoothness and efficiency.

The boxer engine in the new BMW R 1300 RT has a capacity of exactly 1 300 cc while the ratio between bore and stroke is 106.5 to 73 mm (predecessor: 102.5 to 76 mm). This increase in capacity derives from an enlarged cylinder bore and a new crankshaft with reduced stroke. It has an output of 107 kW (145 hp) (predecessor: 100 kW (136 hp), still at 7 750 rpm, and develops a maximum torque of 149 Nm at 6 500 rpm (predecessor: 143 Nm at 6 250 rpm), making it by far the most powerful serial production BMW boxer engine to date. Its maximum engine speed is 9 000 rpm.

In addition to the significantly increased maximum output compared to the predecessor model, the new BMW R 1300 RT benefits in particular from an even more commanding torque. This makes the new R 1300 RT more potent and dynamic than ever before, combining enormous pulling power with impressive peak power output. And this applies to riding fun both solo and with a passenger, whether on sporty rides, long winding country roads or for extended tours and trips.

It was also possible to optimise efficiency. Despite offering significantly more power and torque, the new BMW R 1300 RT uses no more fuel than its predecessor. The boxer engine sets standards in terms of running smoothness, too, offering an even more direct response to throttle commands thanks to reduced load reversal cycles in the powertrain. Ideal alignment of the engine-frame combination also ensures an exemplary vibration response.

The boxer engine in the new R 1300 RT still uses the well-established air/liquid cooling system where coolant flows through the engine elements that are subject to particular thermal stress, such as the cylinder heads and parts of the cylinders. Other features that are retained include the vertical-flow cylinder heads, variable oil intake, effective piston base cooling and the DOHC valve gear with light cam followers. In the new boxer engine, the two camshafts are driven on each side of the cylinder by a timing chain running over both camshafts, each from a reduction sprocket. On the right-hand side the drive is located in front of the cylinder, while on the left-hand side the timing chain duct is arranged behind the cylinder. Furthermore, the engine of the new BMW R 1300 RT features the tried-and tested knock sensor system to ensure maximum touring suitability and the BMS-O engine management system for highly effective carburation.

With a significantly increased output and torque, the boxer engine compresses the fuel-air mixture in a ratio of 13.3:1 (predecessor: 12.5:1). The gain in power and torque with high efficiency is due to recalculated timing and larger valve diameters: these now measure 44 mm instead of 40 mm on the inlet side and 35.6 mm instead of 34 mm on the outlet side.

Gearbox located below the engine for even more compact packaging with reduced weight. New propeller shaft drive and rear axle transmission.

The 6-speed gearbox and clutch are integrated in the engine housing in the new BMW R 1300 RT, too. However, the transmission is no longer located behind the engine, but underneath it. The particular advantages of this new arrangement lie in a reduced overall length and in improved packaging and weight balance, since it was possible to make the transmission shafts significantly shorter. Compared to the power unit of the predecessor models, it was possible to achieve a weight saving of no less than 3.9 kg on the basic engine and 6.5 kg on the powertrain as a whole. At the same time, an even greater concentration of mass towards the overall centre of gravity ensures even better handling qualities. As before, power is transmitted to the 6-speed gearbox via a wet clutch with ten lining discs and a

self-reinforcing anti-hopping mechanism. Output is via two spur gears, one of which has an integrated judder damper.

In the interests of increased shifting precision, the gearbox now has a sensor signal transmitter based on a new concept involving a torsion magnet. This is reflected in a much more direct feel when shifting gears.

The propeller shaft now has larger universal joints, while a reduced deflection angle also reduces the non-uniformity of the rotational transmission that is inherent in propeller shaft joints. The rear axle transmission has a longer wheel axle stub for even easier mounting and dismounting of the rear wheel.

BMW ShiftCam technology for superior performance and running smoothness as well as excellent fuel consumption and emission levels.

The boxer engine of the new BMW R 1300 RT is also equipped with the unique BMW ShiftCam technology for varying the valve timing and valve stroke on the intake side. At the heart of this technology is a single-section intake shift camshaft which has a partial-load and a full-load cam for each valve to be actuated, each with a different cam geometry. While the partial-load cam has been configured to ensure optimised fuel consumption and refinement, the full-load cam is designed for optimised output.

The intake cams for the left and right-hand intake valves differ in stroke and angular position. This phase shift means that the two intake valves are opened to different degrees and on a time-staggered basis. The effect of this is to create a swirl and therefore greater agitation of the fuel-air mixture flowing into the combustion chamber. As a result, the new BMW R 1300 RT benefits from even more effective combustion and fuel utilisation.

Lightweight stainless steel exhaust system for optimum performance characteristics and low weight.

The exhaust system of the new R 1300 RT, made entirely of stainless steel, works according to the 2-in-1 principle: it is designed for optimum output and torque in conjunction with BMW ShiftCam technology and for very low weight. It enables a very

homogeneous power output and torque curve, thereby ensuring the best possible rideability and performance – whether on country roads or on extended tours. Exhaust gas purification is taken care of by a closed-loop catalytic converter controlled by an oxygen sensor. In this way, the new R 1300 RT complies not just with current exhaust standards, it is excellently equipped to meet future requirements, too.

Three riding modes are included as standard, allowing the bike to adapt ideally to any road conditions.

In standard trim, the new R 1300 RT has three riding modes for adaptation to individual rider preferences. The “Rain” and “Road” riding modes allow riding characteristics to be adapted to most road conditions. The “Eco” riding mode also makes it possible to use the innovative BMW ShiftCam technology primarily in such a way that the maximum range can be achieved with a single tank of fuel. In this riding mode, a gentle throttle curve and moderate torque limitation promote a riding style that is as economical as possible. In order to provide visual support for a riding style geared towards optimised fuel consumption, an efficiency indicator in the upper status line of the TFT colour screen provides feedback when “Eco” mode is activated. If maximum performance is required – e.g. on gradients or when overtaking – it is simple to quickly switch to another riding mode using the riding mode button.

Riding Modes Pro with the additional modes “Dynamic” and “Dynamic Pro”, along with riding mode pre-selection as optional equipment ex works. Engine drag torque control (MSR) as standard.

On request the new R 1300 RT can also be fitted with the optional equipment item “Riding Modes Pro” ex works: among other things, this comprises the additional riding modes “Dynamic” and “Dynamic Pro”. In addition, the riding mode Dynamic Pro allows adaptation to individual needs.

With the riding mode pre-selection the rider can use the riding mode button to make an individual selection. For this purpose, at least two and a maximum of four riding modes can be chosen from a list in the settings menu, and these can be selected successively using the riding mode button. This offers a wide range of options

for configuring the new R 1300 RT to suit the rider's personal needs. In this way, a preferred and easily manageable number of riding modes can be configured and selected while riding.

Engine drag torque control (MSR) is on board even in standard trim. This can be used to safely avoid unstable riding conditions that can occur during coasting or downshifting due to excessive brake slip at the rear wheel. In these cases, MSR instantly opens the throttle valves to such an extent that drag torque is equalised and the motorcycle stabilises.

The control response depends on the riding mode. In "Eco", "Rain" and "Road" riding modes, MSR ensures maximum ride stability, whereas in "Dynamic" and "Dynamic Pro" riding mode the control system allows a more slip.

Dynamic Traction Control DTC as standard.

As standard, Dynamic Traction Control DTC uses fixed base settings to control rear wheel slip in the "Rain", "Road" and "Eco" riding modes.

Automated Shift Assistant (ASA) with fully automated clutch operation and manual or automated shifting for an enhanced motorcycling experience as optional equipment ex works.

With the Automated Shift Assistant (ASA), BMW Motorrad offers an innovative technical solution to make motorcycling easier and more comfortable. True to the motto "Simplify your Ride", automated clutch operation and gear changes puts the riding experience even more front and centre - without sacrificing the emotionally important dynamic experience of the shifting process.

ASA features a clever functional design in which two electromechanical actuators automate clutching and shifting in the conventional 6-speed gearbox – the key difference from a conventional shift assistant. As a result, there is no need for a clutch lever for manual operation. Starting, stopping and manoeuvring are effortless.

What is more, ASA enhances the actual riding experience with quick gear-shifting processes which are appropriate to the load and engine speed, and the resulting precise gear changes. The rider workload is thus reduced, resulting in even greater riding

enjoyment. ASA also creates a more direct connection to the powerful boxer engine, as the precise clutch actuation makes it easier to control the ride via throttle grip and gear lever.

In shift mode "M", gears can still be changed manually using the foot lever, allowing the rider to choose the exact shift point. ASA really comes into its own in shift mode "D": here, perfectly timed gear changes with smooth torque interruption deliver efficient acceleration and greater ride stability. When shifting up, for instance, the usual jolt of a manual gearbox is largely eliminated, reducing the risk of helmet contact between rider and passenger.

Downshifts are also carried out with maximum smoothness, minimising any disruption to the chassis. In order to ensure optimal gear shifting for each driving situation, the different riding modes are assigned specific characteristics of the automated shifting function. And when used in conjunction with cruise control or Front Collision Warning, the networking of functions brings the future of motorcycling within reach.

A summary of the benefits offered by Automated Shift Assistant (ASA):

- No need for the rider to operate the clutch.
- Dynamic and convenient gear shifts for a more engaging ride.
- Choice between manual and automated shifting.
- Automatic adaptation of shifting behaviour to rider's style in automated mode D.
- Prevents the engine from stalling due to poor shift timing.

4. Chassis/suspension.



"The new BMW R 1300 RT is the most dynamic BMW RT of all time, without neglecting the typical RT virtues such as touring ability and riding comfort. This applies in conjunction with the newly developed semi-active Dynamic Chassis Adaption (DCA) suspension, which is available as optional equipment. This allows the rider to select two different riding positions to maximise the spread between ride comfort and dynamic handling.

Ralf Mülleken, Project Manager Riding Dynamics BMW R 1300 RT

Completely newly developed chassis with sheet metal main frame made of steel and aluminium rear frame.

The chassis of the new BMW R 1300 RT has been completely redesigned. The centrepiece is the new sheet metal main frame made of steel, which in addition to a significant optimisation of the installation space for even more compact packaging also offers higher levels of stiffness than the predecessor model. In the course of the redesign, the rear frame was also completely reconceived. In place of the previous tubular steel construction, the new R 1300 RT now has an aluminium lattice tube rear frame made of aluminium tubes and forged parts. The choice of this design with load-bearing, slender, hexagonal extruded aluminium profile tubes for the lower beam is based on the requirement that the new R 1300 RT will be used primarily for long journeys. High seating comfort for the rider and passenger, combined with a large-volume luggage system, have been given priority. Two-stage seat height adjustment for the rider's seat and longer, more comfortable seats for the rider and passenger are conceptually linked to the choice of rear frame concept. The transition to the fuel tank has been designed to accommodate the seat height adjustment.

In combination with a drive unit that is now much more compact, the new design of the chassis achieved a significant concentration of mass towards the overall centre of gravity, which is reflected in noticeable handling benefits. At the same time, the new R 1300 RT is even more precise and stable when braking, requires noticeably less effort to ride, and offers an even more satisfyingly precise response of the suspension elements.

The best of both worlds: EVO Telelever front wheel guide with flex element and EVO Paralever rear wheel guide for even greater steering precision and ride stability.

The front wheel guide in the new R 1300 RT follows the Telelever principle introduced by BMW Motorrad 30 years ago - but in an innovative, newly designed form that combines the best of both worlds.

On sporty BMW motorcycles such as the R 1200 S or the HP2 Sport, the upper fork bridge is clamped directly to the fork tubes and attached to the frame via a ball joint mounted on the frame. This creates a very stiff connection between the fork legs and fork bridge, so the tilting movement of the upper fork bridge which is inherent in the Telelever system is hardly noticeable due to the short handlebars. On vehicles with wide and high handlebars, however, this tilting movement would have a detrimental effect. For this reason, the upper fork bridge is rigidly but rotatably bolted to the frame via a deep groove ball bearing.

With the Evo Telelever in the new BMW R 1300 RT, BMW Motorrad combines the strengths of the two previously used Telelever variants, such as brake pitch compensation and decoupling of the spring and steering/wheel guidance functions. Clamped tightly to the fork tubes - as previously in the sporty design - the upper fork construction incorporates a handlebar decoupling system that prevents any detrimental tilting movement and only transmits steering forces. The connection from the handlebar bridge to the upper fork bridge is the core element of the design, a stainless steel plate, the so-called flex element. Due to its flexibility and geometric design, it is able to compensate for the tilting movement while at the same time transmitting steering forces. The actual upper fork bridge is pivotally and rotatably connected via a radial swivel bearing to a sturdy steering shaft tube, which in turn is guided in the main frame via a cylindrical roller bearing at the top and a deep groove ball bearing at the bottom. This sophisticated construction creates significantly greater rigidity, which is reflected in the noticeably increased ride stability of the new R 1300 RT. The simultaneous addition of an extra roller bearing for the ball joint in the lower fork bridge also ensures thrilling steering precision due to the lower bearing friction. The spring strut is electronically adjustable in terms of damping rebound and compression damping as well as spring rate. The spring travel is 149 mm at the front.

The rear wheel guide of the new R 1300 RT has also been redesigned. The hallmark of the Evo Paralever is a significantly stiffer connection via the suspension in the frame and a continuous swinging arm quick-release axle. The spring strut is also electronically adjustable in terms of damping rebound and compression damping as well as spring rate and spring preload. The spring travel is 158 mm.

The new R 1300 RT features new 17-inch aluminium cast wheels with hollow-spoke design. All in all they weigh in at more than 1.4 kg less than the existing wheels. The reduced rotational masses result in both improved acceleration and brake response as well as optimised handling qualities. The wheel size at the front is 3.5 x 17" and 6.0 x 17" at the rear, with tyres fitted in sizes 120/70 ZR 17 at the front and 190/55 ZR 17 at the rear.

New electronic suspension Dynamic Chassis Adaption (DCA) for two different, rider-selectable riding modes for maximum spread between ride comfort and dynamic handling and with dynamic adjustment of damping, spring rate and load equalisation as optional equipment ex works.

The standard Dynamic ESA electronic suspension itself offers a high level of ride safety and riding fun on a wide variety of road surfaces with its dynamic adjustment of the damping and adjustable spring rest at the rear.

The electronic Dynamic Chassis Adaption (DCA) now goes one step further and, in addition to the familiar Dynamic Suspension Adjustment (DSA) options - such as dynamic adjustment of damping, spring rate and load equalisation - offers two rider-selectable riding positions via the riding modes for maximum spread between ride comfort and dynamic handling. This makes for an even more thrilling riding experience in all conditions.

DCA has been developed with equal emphasis on dynamics and comfort. The new semi-active chassis offers two different riding positions. One riding position has a flat steering head angle and therefore a chassis geometry designed to maximise riding stability and smoothness. The second riding position features firmer damping tuning, a higher spring rate and a higher ride height. Raising the rear end more than the front results in a steeper

steering head angle and reduced castor, making the motorcycle easier to steer and handle.

DCA makes these two different chassis geometries possible and combines them with the riding modes. The Eco, Rain and Road riding modes combine a stable, smooth riding position with road-oriented ROAD damping and a softer spring rate. The result is confident, comfort-oriented touring.

The Dynamic and Dynamic Pro riding modes activate the firmer DYNAMIC damping tuning with a stiffer spring rate. In addition, the preload adjuster is extended to raise the rear spring base, raising the rear approximately 30 mm. There is no preload adjuster at the front. However, the higher spring rate still raises the front by approx. 8 mm. This "lengthening" of both struts only occurs at speeds above about 20 km/h. Below approx. 10 km/h, the suspension is lowered again to ensure that the seat height is always the same when stationary. "Lengthening" both struts increases ground clearance, which has a direct effect on lean angle clearance.

In addition, DCA includes all the features already known from DSA: Spring rate adjustment, automatic load compensation and two damping modes that can be customised by the rider via click-setting. Another practical comfort feature is the prop-up aid. This makes it easier to prop up the vehicle on the main stand, which is available as optional equipment.

A high-performance braking system in conjunction with Integral ABS Pro comes as standard. Sport brake as optional equipment ex works.

The new R 1300 RT comes as standard with a twin disc brake featuring two radially mounted four-piston fixed callipers at the front and a single disc brake with two-piston floating calliper at the rear in conjunction with BMW Motorrad Integral ABS Pro. Here, the handbrake lever activates the front and rear brakes simultaneously. Integral ABS Pro is optimised for the respective purpose by means of an additional set-up that depends on the riding mode. In the Integral ABS Pro settings it is possible to lock the rear wheel via the foot brake lever.

As a back-up system to Integral ABS Pro, Dynamic Brake Control (DBC) offers increased safety when braking - also in difficult situations - by preventing unintentional throttle application. By means of intervention in the engine control, the drive torque is reduced during braking, making full use of the braking power at the rear wheel. This keeps the motorcycle stable and shortens the braking distance. Thanks to the standard dynamic brake light, traffic to the rear is alerted to even more effectively to the fact that the motorcycle is being braked.

The new BMW R 1300 RT can be fitted with the sport brake system as optional equipment ex works. In addition to a sportier look with titanium-coloured brake callipers, it offers a slight increase in braking performance.

5. Electrical system and electronics.



"The new full LED headlight in combination with characteristic daytime running light icons give the new BMW R 1300 RT an unmistakable front view. Headlight Pro is available as an option with adaptive headlight and pitch compensation, and for the first time adaptive light modes offer intelligent adjustment of the direction and intensity of the low beam to different riding situations. With the Riding Assistant featuring Active Cruise Control (ACC) and Frontal Collision Warning (FCW), Lane Change Warning (SWW) and Rear End Collision Warning (RECW), major new features are available as optional equipment ex works for added safety and comfort."

Matthias Hillebrand, Product Manager BMW R 1300 RT

New full LED headlight and state-of-the-art LED light units feature all round. Headlight Pro with adaptive headlight as optional equipment ex works.

For decades now, BMW Motorrad has been regarded as a frontrunner when it comes to safety in connection with motorcycling. Accordingly, the new R 1300 RT comes with state-of-the-art LED light units all around as standard. The new full LED headlamp illuminates the road with unrivalled brightness and clarity, underlines the prestige of the new R 1300 RT. The light unit consists of an LED module with a total of twelve LEDs for the low beam and five LEDs for the high beam. The daytime running light or position light icon (depending on the market), which is positioned to the left and right of the headlamp, provides a distinctive look.

Headlight Pro goes one step further available as optional equipment ex works. The headlamp of the new R 1300 RT then features the adaptive headlight as well as pitch compensation. The optional Headlight Pro adds additional LEDs to the headlight. The headlight then has a total of 16 LEDs for the low beam and a further 31 LEDs for the high beam.

With the Headlight Pro equipment, the headlight features the adaptive function. Depending on the leaning angle, additional LEDs

are switched on to ensure an ideally illuminated horizon even when the vehicle is banking in a bend.

Headlight Pro has a servomotor that automatically and actively adjusts the position of the cut-off line during braking and acceleration to keep the vertical pitch within the optimum range when the load or load condition changes. The pitch compensation is up to 1.5° during acceleration and up to 3.5° during braking. Even with DCA, the servomotor ensures that the headlight range is still optimised when the vehicle is pitching.

Adaptive Light Modes, which intelligently adjust the direction and intensity of the low beam to different riding situations, are available as optional equipment ex works.

Headlight Pro can be further enhanced with the option of Adaptive Light Modes (market-dependent), which offers lighting technology that intelligently adapts the direction and intensity of the low beam to different riding situations. The Adaptive Lighting Modes provide optimum lighting conditions for night-time riding with speed-dependent road illumination. Lighting is provided in several stages: for low, medium and high speeds. Intelligent adaptation to speed and riding conditions increases safety and helps to guide the rider.

The Adaptive Light Modes automatically adjust the alignment and focus of the low beam to suit the riding conditions, without dazzling or distracting the rider or other road users. The light intensity is optimised in specific light modes for the relevant areas of the field of vision. This ensures the best possible illumination of the road. For example, as the Adaptive Light Modes move the light focus further into the distance, the LEDs become brighter.

The appropriate light mode is automatically activated depending on the vehicle speed. This provides optimum road illumination for both urban and suburban riding.

10.25-inch TFT colour display with map navigation, a wide range of functions and new Connectivity Hub for controlling accessories as standard.

The R 1300 RT comes fitted as standard with a 10.25-inch TFT colour screen with integrated map navigation and newly developed Connectivity Hub. With maximum connectivity, excellent readability, clear menu navigation and a highly integrated operating concept,

the new R 1300 RT maintains its leading position among production motorcycles.

For tough touring use, the screen is fitted with a hardened and therefore extremely robust glass cover. It is anti-reflective for optimum display and protected from soiling by means of an anti-fingerprint coating. The full HD resolution with 1920 x 720 pixels offers unique detail and sharpness.

The screen's full capability comes into play in full screen mode. Meanwhile, the alternative split screen view allows several functions to be shown simultaneously and clearly on the screen, allowing Multicontroller operation. The main display - or "Pure Ride Screen" - shows the speedometer and engine speed display as well as the basic functions and selection menu. Alternatively, the navigation map is also displayed if navigation is active via the BMW Motorrad Connected app. The additional split screen shows either the on-board computer, the on-board trip computer, arrow navigation, a current phone call or radio/media.

The "tiles" shown can be used to select the "My Motorcycle", "Radio", "Navigation", "Media", "Phone" and "Settings" menus. There is seamless integration of the display and operation of the optional extras Riding Modes Pro, ACC and audio/radio: this makes operation easy, just as for the standard functions.

A new feature is the Connectivity Hub "tile" for connecting current and future accessories such as smart glasses, heated vests and lightweight jackets. This simplifies the operation of the accessories.

The screen on the new R 1300 RT has two radio antennas for connections to a helmet or smartphone, for example. One antenna is available for Bluetooth, another enables data exchange via wireless WLAN and Bluetooth.

Vehicle functions such as "Settings", "Navigation" and "Communication" are operated using the standard Multicontroller. The "Favourites" button has been redesigned with the aim of providing enhanced and particularly straightforward, intuitive operation. The unit consisting of four buttons is located on the left-hand side of the trim underneath the handlebars: two-stage tactile control allows access to functions such as "Audio" or "Heated

grips", making selection and operation of the functions even easier. Two-stage keying means that when pressed lightly, information is given about which function the key controls and what settings are available. If the key is pressed beyond the pressure point, its function can be applied.

The keys can be assigned the following functions, for example:

- Start/stop media playback (mute).
- Heating menu (heated grips and optional seat heating).
- Switch source - audio/media.
- Navigation (access to active app navigation).
- And more.

With its new 10.25-inch TFT colour screen, the R 1300 RT also provides the perfect platform for using a full interactive map view in conjunction with the navigation system of the BMW Motorrad Connected App. The navigation (map) is "mirrored" onto the screen via WLAN. As such, the new R 1300 RT offers a whole new dimension of map navigation for motorcycles. The 10.25-inch TFT colour screen now allows many more integrated navigation options to be operated via the Multicontroller. Thanks to the smartphone-based architecture, navigation is always on board: it couldn't be simpler to make route changes during a coffee break or share a route with friends.

The smartphone app provides the rider of the new R 1300 RT with the latest navigation software and maps on an ongoing basis, as well as offering the latest functions. The app also allows maximum planning flexibility: It can be used for route planning itself, importing planned routes from Basecamp or downloading suggested routes from websites.

The BMW Motorrad Connected App can be downloaded free of charge from the Google and Apple app stores. It also comprises attractive additional functions such as route logging and the display of other travel statistics and information.

Audio System and Audio Pro available as optional extras ex-works for outstanding sound.

With the Audio System, the new R 1300 RT offers an even more intense sound experience. The aerial for radio reception is invisibly

integrated into the bodywork. The system is visually identified by the black perforated grilles with black fleece backing above the loudspeakers.

The audio system is highly integrated into the vehicle's electrical system. The menu control, setting options and unique display concept make the audio experience perfect in terms of interaction as well. In addition to the loudspeakers, a connected communication system can also be used for playback.

The highlights of the audio system:

- DAB and DAB+ for top-quality, unadulterated listening pleasure and reception stability.
- DAB-FM following. The received signal is compared and the best signal is automatically selected.
- Equalising profiles - listening-optimised profiles for output adaptation for a perfect audio experience
 - via the helmet: one profile (studio).
 - via loudspeakers: four profiles (bass-boost, treble-boost, voice, balanced).
- Highly flexible sound architecture design options (treble/bass) with a very broad output spectrum (output range), even at high speeds.
- HD radio. The digital radio for the US market with FM/AM band and SAT radio as an option for the USA.

Audio Pro offers an even more impressive sound experience. Ordered as an optional equipment to the audio system, it features higher quality loudspeakers with separate tweeter/midrange and woofer control for extra powerful, crystal-clear sound. Various sound profiles and dynamic volume adjustment guarantee optimum listening pleasure in every riding situation. Audio Pro is also a visual highlight. A silver perforated grille without fleece provides a clear view of the speakers with their gold dust protection dome. With Audio Pro, music is still perfectly audible at higher speeds. The further improvement in sound quality is also due to the more sophisticated hardware.

Whereas in the first stage of the audio system two tweeters and two woofers are driven by two channels via a passive crossover, Audio Pro replaces these components with higher quality tweeters

and woofers. In addition, they are actively driven across four channels (two in the basic audio system), eliminating the need for a passive crossover. This allows even more precise tuning. In addition, the speaker housing is lined with Basotec absorber foam, which absorbs unwanted vibrations and provides a better resonance body. Audio Pro can also be turned up louder at high speeds than the basic audio system.

In addition, the "Voice" sound profile of the basic audio system is replaced by "Adaptive" in Audio Pro. The aim of "Adaptive" is to always provide the right balance at different speeds. At low speeds - and usually with quiet music - the low frequency range is slightly exaggerated. At high speeds - when the volume is high and the wind noise would drown out the music - the high frequencies are exaggerated.

Riding Assistant with Active Cruise Control (ACC), Front Collision Warning (FCW), Lane Change Warning (SWW) and Rear End Collision Warning (RECW) for even greater comfort and safety when riding available as optional equipment ex works.

The new R 1300 RT is already equipped with Dynamic Cruise Control (DCC) with braking function as standard. The Riding Assistant offers many more functions as optional equipment ex works. It consists of Active Cruise Control (ACC), Front Collision Warning (FCW), Lane Change Warning (SWW) and the new Rear End Collision Warning (RECW).

Active Cruise Control (ACC) enables maximum comfort and the best possible safety when motorcycling: the electronic cruise control with integrated distance control can be used to set the desired riding speed as well as the distance to the vehicle in front. A radar sensor at the front of the motorbike determines the distance to the vehicle ahead. If this distance decreases, the system reduces speed and automatically restores the desired distance. This frees the mind for carefree riding fun – also ensuring a relaxed ride, especially on lengthy tours.

The Front Collision Warning (FCW) with brake intervention is designed to prevent collisions and help reduce the severity of accidents. The Front Collision Warning uses the ACC radar system to provide protection from rear-end collisions. The rider assistance

system can warn of potential collisions with other vehicles and preconditions the brakes.

Lane Change Warning (SWW) monitors the lanes to the left and right and can help ensure a safe lane change while supporting use of the rear mirror. A radar sensor monitors the area behind the motorcycle, as well as covering the infamous blind spot. If another vehicle is approaching or dangerously close and could potentially be overlooked by the rider, Lane Change Warning detects this and warns against changing lanes. This is indicated by a symbol in the respective rear mirror.

The rear end collision warning (RECW) signals to following traffic that a rear collision is imminent by flashing the warning lights at a higher frequency. This visual warning is triggered by a vehicle in the same lane, detected by the radar sensor at the rear of the new R 1300 RT and indicated by the simultaneous flashing of the rear direction indicators.

Comfort Passenger Package for touring as a couple available as optional equipment ex works.

In addition to the heated grips, which are also available as optional equipment ex works, the new seat heating for rider and passenger provides comforting warmth on cold days - for a more enjoyable riding experience together. Seat heating for the rider is available for all comfort seats. The seat heating for the passenger as optional equipment ex works is only available in conjunction with the comfort passenger seat. The seat heating can also be retrofitted as an Original BMW Motorrad Accessory using these comfort seats. As an absolute highlight, a heated backrest for the topcase and heated grips for the passenger are also available. This ensures maximum passenger comfort. The R 1300 RT must be factory fitted with the optional seat heating, variable luggage system, topcase holder or central locking.

Actively ventilated mobile phone charging compartment with USB-C charging port.

The new R 1300 RT comes as standard with an actively ventilated smartphone charging compartment located within the rider's reach. It is even easier to open than its predecessor and can accommodate much larger smartphones. The smartphone battery

is charged via a USB-C interface. The lid also has a clip that can be used for a debit card or banknotes.

Intelligent Emergency Call as an ex works option for further increased safety.

Ensuring the fastest possible assistance in the event of an accident or in situations of emergency and danger can save people's lives. For this reason, BMW Motorrad has developed an eCall system - "Intelligent Emergency Call" - which aims to get help to the scene of the incident as quickly as possible.

6. Equipment programme.



Optional equipment and Original BMW Motorrad Accessories for the new BMW R 1300 RT.

An extensive program of optional equipment and optional accessories is available for further customisation of the new BMW R 1300 RT. Optional equipment items are supplied ex works and are integrated in the production process. Optional BMW accessories are installed by the BMW Motorrad dealer or by customers themselves. These are also features which can be retrofitted.

In addition to the existing range of Original BMW Motorrad Accessories, the following new items are available for the R 1300 RT.

Optional equipment packages.

- **Comfort Passenger Package:** Topcase holder, large topcase, power socket, comfort rider's seat, comfort passenger seat.
- **Dynamic Package:** DCA, Shift Assistant Pro or Automated Shift Assistant ASA, riding modes Pro, sport brake.
- **Innovation Package:** Headlight Pro, Adaptive Light Modes, Riding Assistant, Rear End Collision Warning.
- **Comfort Package:** Central locking, anti-theft alarm, centre stand with prop-up aid, variable luggage system.

Individual items of optional equipment.

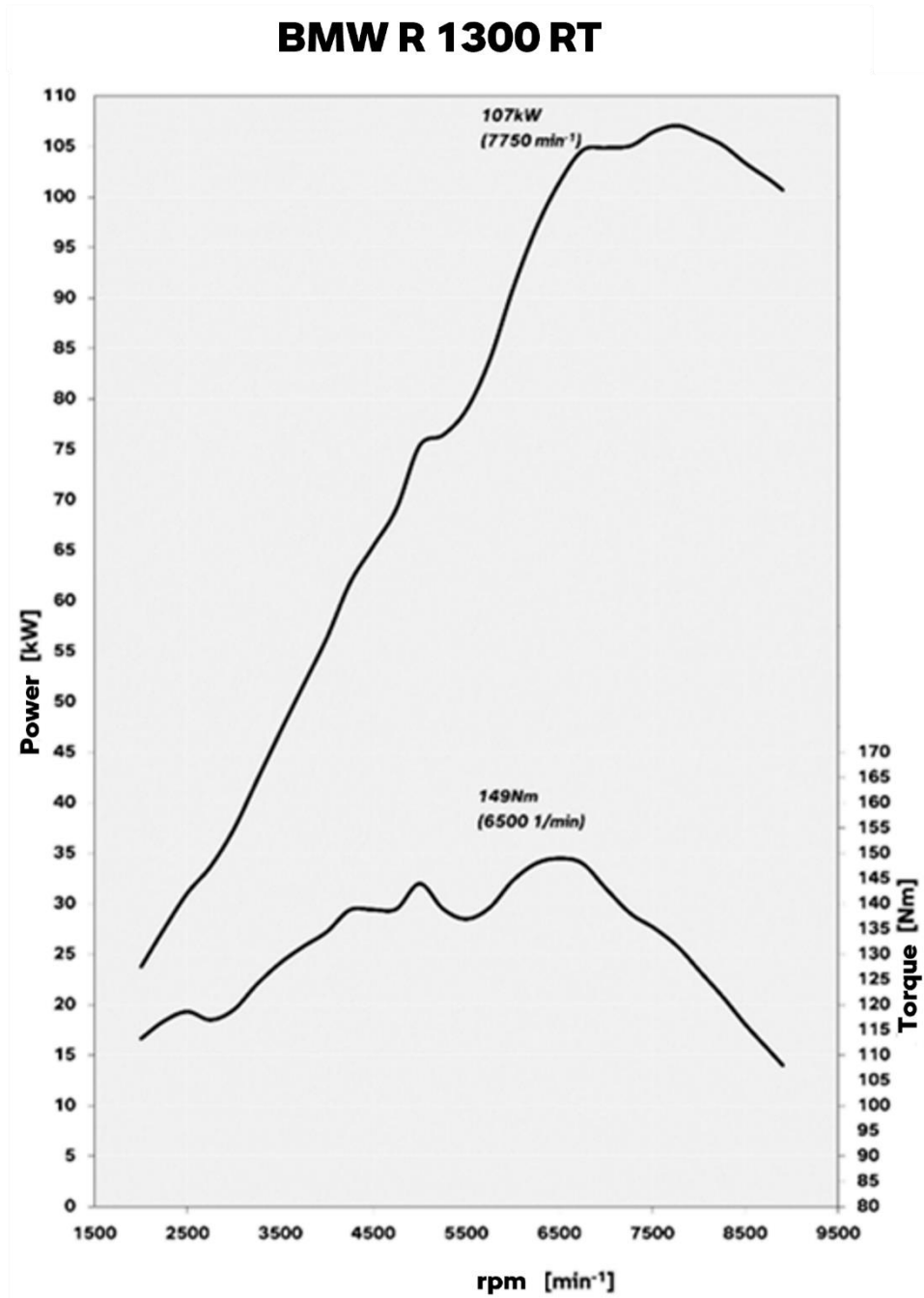
- Aluminium fuel tank 1.
- Design option chrome-plated rear silencer.
- Design option rear silencer, dark chrome-plated.
- Chrome-plated manifold.
- Manifold, dark chrome-plated.
- Automated Shift Assistant.
- ECE/US audio system.

- Audio Pro.
- Design option wheels.
- Forged handlebars.
- Windshield, high.
- Windshield Sport.
- Variable wind deflector.
- Additional LED headlamp.
- Intelligent Emergency Call.
- Teleservices.
- Centre stand.
- Tubular handlebars.
- Comfort rider's seat with seat heating.
- Comfort rider's seat, low with seat heating.
- Comfort rider's seat, high with seat heating.
- Comfort passenger's seat with seat heating.
- Option 719 Milled Parts Package Shadow.
- Option 719 Wheel Sport.
- Cold country version.

Original BMW Motorrad Accessories.

- Case protector.
- Topcase large 54 l electrified.
- Topcase small 39 l.
- Case liner topcase large/small.
- Case liner cases left/right.
- Additional topcase brake light.
- Engine protection bar.
- Comfort windscreen.
- Adjustable rider footrests.

7. Engine output and torque.



8. Technical specifications.



R 1300 RT		
Engine		
Capacity	cc	1,300
Bore/stroke	mm	106.5 x 73
Output	kW/hp	107/145
at engine speed	rpm	7,750
Torque	Nm	149
at engine speed	rpm	6,500
Type	Air/liquid-cooled 2-cylinder 4-stroke boxer engine with two overhead, chain-driven camshafts, a counterbalance shaft and variable intake camshaft control system BMW ShiftCam	
Compression	13.3:1	
Fuel	Premium unleaded 95 RON	
Valves per cylinder	4	
Ø intake/outlet	mm	44/35.6
Ø throttle valve	mm	52
Engine control	BMS-O	
Emission control	Closed-loop three-way catalytic converter, exhaust standard EU-5+	
Electrical system		
Generator	W	650
Battery	V/Ah	12/12,5
Headlight	LED	
Rear light	LED brake/rear light	
Starter	W	900
Power transmission		
Clutch	Wet clutch with anti-hopping function, hydraulically activated	
Transmission	Claw-shift 6-speed transmission	
Primary ratio	1.479	
Transmission ratios	I	2.438
	II	1.714
	III	1.296
	IV	1.059
	V	0.906
	VI	0.794
Secondary drive	Propeller shaft	
Secondary ratio	2.818	

Chassis

Frame construction type	Two-part frame concept consisting of main frame and rear frame bolted to it, engine co-supporting		
Front wheel suspension	BMW Motorrad EVO Telelever		
Rear wheel suspension	Cast aluminium single-sided swinging arm with BMW Motorrad EVO Paralever, WAD (optional equipment: DCA)		
Spring travel, front/rear	mm		149/158
Wheel castor	mm		115
Wheelbase	mm		1.500
Steering head angle	°		64
Brakes	front	Twin disc brake, floating brake discs, Ø 310 mm, 4-piston radial brake callipers	
	rear	Single disc brake, Ø 285 mm, 2-piston floating calliper	
ABS			Standard equipment BMW Motorrad Integral ABS Pro (full integral, lean angle optimised)
Wheels			Light alloy cast wheels
	front	"	3.50 x 17"
	rear		6.00 x 17"
Tyres	front		120/70 ZR 17
	rear		190/55 ZR 17

Dimensions and weights

Total length	mm		2,229
Total width incl. handlebar weight + mirrors	mm		971
Seat height	mm		780/860
DIN unladen weight, road ready	kg		281
Permitted total weight	kg		510
Fuel tank capacity	l		24

Performance figures

Fuel consumption (WMTC)	l/100 km		4.9
CO2	g/km		113
Acceleration 0-100 km/h	s		3.6
Top speed	km/h		>200