



Press Information
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The new Mercedes-AMG SL: The new edition of an icon


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The descriptions and information in this press kit apply to the international model range of Mercedes-Benz. Details may vary from country to country. Further information about the vehicles offered, including the WLTP figures, can be found for each country at <https://www.mercedes-benz.com>

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More information on the official fuel consumption and the official specific CO₂ emissions of new passenger cars can be found in the "Leitfaden über den Kraftstoffverbrauch, die CO₂-Emissionen und den Stromverbrauch neuer Personenkraftwagen" [Guide on the fuel economy, CO₂ emissions and power consumption of new passenger cars], which is available free of charge at all sales outlets and from Deutsche Automobil Treuhand GmbH at www.dat.de.

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The new edition of an icon

The new Mercedes-AMG SL: short version

Affalterbach. The new Mercedes-AMG SL, the new edition of an icon, returns to its roots with a classic soft top and sporty character. At the same time, the luxurious roadster as a 2+2 seater is particularly suitable for everyday use and puts its power down on the road with all-wheel drive for the first time. High-tech components such as the AMG ACTIVE RIDE CONTROL suspension with active anti-roll stabilisation, rear-axle steering, the optionally available AMG ceramic high-performance composite brake system and the standard-fit DIGITAL LIGHT with projection function sharpen the sporty profile. In combination with the AMG 4.0-litre V8 biturbo engine, this results in a driving experience of the highest order. As a consistent Performance Luxury model, Mercedes-AMG in Affalterbach has developed the SL completely independently. Two models with AMG V8 engines will kick off the market launch.

Almost 70 years ago, a sports car launched in Stuttgart immediately became a legend. The vision of expanding the potential of the Mercedes-Benz brand through motor racing successes produced the first SL as a result - a road-going racing sports car. Shortly after its debut in 1952, the 300 SL (internal designation W 194) reaped success after success on the race tracks of the world. In its first year, it achieved, among other things, a spectacular one-two victory in the legendary 24 Hours of Le Mans and even took the first four places in the Nürburgring Grand Jubilee Prize for sports cars. Its successes quickly make the SL a legend.

The successful racing car was followed in 1954 by the 300 SL production sports car (W 198), which is called the "Gullwing" because of its unusual doors. In 1999, a jury of motoring journalists voted it the "Sports Car of the Century". Other highlights of the model history include the "Pagoda" (W 113, 1963-1971), the evergreen R 107 (1971-1989), which was built for 18 years, and its successor, the R 129, which is considered an automotive sculpture because of its striking wedge shape. The abbreviation "SL" to this day thus stands for one of the few genuine automotive icons in the world.

In the decades-long development history from full-blooded racing car to open-top luxury sports car, the new Mercedes-AMG SL now sets another milestone. It combines the sportiness of the original SL with the unique luxury and technological excellence that characterise modern Mercedes models.

"The SL is an icon: For almost 70 years, the distinctive sports car has delighted Mercedes customers of every generation around the world. With the rebirth of the roadster from Mercedes-AMG, the new SL more than ever remains the symbol of this timeless fascination", says Britta Seeger, Member of the Board of Management of Daimler AG responsible for Mercedes-Benz Cars Marketing and Sales.

"The new SL combines the sporty genes of the original SL with the driving performance typical of AMG. At the same time, it offers luxury and comfort at the absolute top level. This combination is unique in the sports car segment and is also reflected in the interior - where the highest levels of comfort and quality meet the right helping of sportiness. The high-quality combination of analogue world and state-of-the-art digital equipment makes it clear that the new SL is the rebirth of an icon for the modern era", says Philipp Schiemer, Chairman of the Board of Management of Mercedes-AMG GmbH.

"With the new SL, we have created a repositioning of the iconic SL design. The expressively modelled exterior conveys a light and purist impression and brings sensual beauty and extravagant design into perfect harmony", says Gorden Wagener, Chief Design Officer Daimler Group.

"We at Mercedes-AMG consider it a great honour to have had the privilege to develop the new edition of this sports car icon. When we were tasked with the overall development of the new SL, we were able to start from scratch without building on an existing structure. We are proud of the result, which once again demonstrates the high level of engineering expertise in Affalterbach. The new 2+2 concept combines agile driving dynamics with a high level of comfort and unrestricted suitability for everyday use", says Jochen Hermann, Chief

With its exciting design, state-of-the-art technology and outstanding driving characteristics, the new Mercedes-AMG SL sets standards in the luxury sports car segment. The exterior design fascinates with a perfect triad: It combines the modern Mercedes-Benz design philosophy of sensual purity with the sportiness typical of AMG and characteristic details. The two power bulges on the bonnet are just one of numerous reminiscences of the first SL generation. The interplay of light and shadow makes the overall appearance visually light and low. So it is clear at first glance that the new SL has returned to its sporty roots.

Exterior design: balanced design with sporty genes

Characteristic features of the body design are the long wheelbase, the short overhangs, the long bonnet, the passenger compartment set back with a strongly raked windscreen and the powerful rear end. This results in the typical SL proportions. Together with the voluminously sculpted wheel arches and the large alloy wheels flush with the outer skin, they give the roadster its powerful, dynamic appearance. When closed, the seamlessly integrated soft top underscores the purist, sporty impression.

The AMG-specific radiator grille emphasises the effect of width of the front end, with its 14 vertical slats, cites the ancestor of all SL models, the legendary 300 SL racing sports car of 1952. Other distinctive design elements include the slim, sharply outlined DIGITAL LIGHT LED headlamps and the equally extremely slim LED rear lamps.

Interior design: Performance Luxury with "hyperanalogue" cockpit

The interior of the new Mercedes-AMG SL transforms the tradition of the first 300 SL Roadster into the modern era. The new edition perfectly combines sporting virtues and luxury. Fine materials and meticulous workmanship underline the standard of the highest level of comfort. The cockpit design, right down to the adjustable central display in the centre console, is focused on the driver. At the same time, the completely new interior space concept with 2+2 seats offers more room and functionality than before. The rear seats increase the daily practicality and offer space for people up to 1.50 metres tall.

The minimalist interior of the 300 SL Roadster, equipped with high-quality materials, inspired the designers in the interior design of the new model: The result is an exciting combination of analogue geometry and digital world - called "hyperanalogue". This is exemplified by the fully digital instrument cluster, which is integrated into a three-dimensional visor. The standard MBUX infotainment system offers a choice of several specific display styles and different modes.

One of many highlights in the interior of the new SL is the sculptural seat design of the standard, electrically adjustable AMG sports seats. The head restraints are integrated into the backrest and emphasise the sporty character. The AIRSCARF is on board as standard: Warm air flows into the passenger compartment from air outlets in the head restraints and wraps around the head and neck area of the driver and front passenger like a scarf. Perfect ergonomics and various progressive seam and quilting patterns complete the symbiosis of high-tech, performance and luxury. AMG Performance seats are available as an option.

The latest generation MBUX (Mercedes-Benz User Experience) is intuitive to operate and capable of learning. It offers numerous functional contents and the operating structure of the second-generation MBUX system, which debuted in the new Mercedes-Benz S-Class. In the SL, AMG-specific content is added extensively in five display styles. Exclusive menu items such as "AMG Performance" or "AMG TRACK PACE" also emphasise the sporty character.

Body shell: new roadster architecture with composite aluminium structure

The 2021 SL is based on a completely new 2+2-seater vehicle architecture developed by Mercedes-AMG. The chassis is designed as a lightweight composite aluminium structure and consists of an aluminium space frame with a self-supporting structure. The design guarantees maximum rigidity and is thus the perfect basis for precise driving dynamics, high comfort, optimal packaging and sporty body proportions. The new body shell was created - as with the first SL in 1952 - literally on a blank sheet of paper: Not a single component comes

from the predecessor SL or any other model such as the AMG GT Roadster.

The aim of the body shell architecture is to realise the driving performance typical of AMG with a focus on lateral and longitudinal dynamics, while at the same time meeting the high standards on comfort and safety. In the new SL, the intelligent material mix enables the highest possible rigidity at a low weight. Optimised material cross-sections and sophisticated component shapes create space for the comprehensive comfort and safety features as well as the soft top. The materials used include aluminium, magnesium, fibre composites and steel, from which the windscreen frame, for example, is made. This serves as roll-over protection in conjunction with the roll bar system behind the rear seats, which can be extended at lightning speed when needed.

Compared to the previous model series, the torsional rigidity of the body shell structure increased by 18 percent. The transverse rigidity is 50 percent higher than the already outstanding value of the AMG GT Roadster. The longitudinal rigidity is 40 percent higher. The weight of the plain body shell is around 270 kilograms. Together with the low centre of gravity, the targeted lightweight construction ensures outstanding driving dynamics.

Active aerodynamics: for perfect balance and high efficiency

A key development focus of the new SL was high aerodynamic efficiency, specifically: a perfect balance between low drag and reduced lift. Here, the luxurious roadster benefits from Mercedes-AMG's wide-ranging motorsport expertise and from extensive active aerodynamic elements at the front and rear. All streamlining elements are seamlessly integrated into the exterior design. Further detailed measures reduce the drag coefficient to C_d 0.31 - an excellent figure for open-top sports cars.

The SL's aerodynamics meet the complex requirements of handling stability, drag, cooling and wind noise. Regardless of whether the top is down or up, the vehicle character and driving characteristics remain unchanged. The even aerobalance helps to defuse critical driving situations, such as a sudden evasive manoeuvre at high speed.

AIRPANEL air control system: two-piece for the first time

A technical highlight in the aero development: the two-piece, active air control system AIRPANEL. The first piece operates with vertical louvres hidden behind the lower air intake in the front apron. The second piece is located behind the upper air intake and has horizontal louvres. Normally all louvres are closed. This position reduces drag and allows the air to be directed specifically towards the underbody. This further reduces front lift. Only when certain temperatures on predefined components are reached and the demand for cooling air is particularly high do the louvres open (the second system only from 180 km/h) and allow maximum cooling air to flow to the heat exchangers.

Another active component is the retractable rear spoiler seamlessly integrated into the boot lid. It changes its position depending on the driving status. In doing so, the control software takes into account numerous parameters: It factors the driving speed, the longitudinal and lateral acceleration and the steering speed into the calculation. The spoiler assumes five different angular positions from 80 km/h to either optimise handling stability or reduce drag.

The optional active aerodynamic element, which is hidden in the underbody in front of the engine, also contributes to the improved handling. This carbon profile, which weighs around two kilograms, reacts to the setting of the AMG driving modes and automatically extends downwards by around 40 millimetres at a speed of 80 km/h. The AMG driving modes are then activated. This creates the so-called Venturi effect, which sucks the car additionally to the road surface and reduces front-axle lift. The driver feels this positively in the steering: The SL can be steered even more precisely into bends and tracks even more stably.

A range of aerodynamically optimised alloy wheels with diameters of 19, 20 or 21 inches is available for the SL, reducing drag through less turbulence. Particularly sophisticated are 20-inch wheels with plastic aero

rings, which also save weight.

The soft top: less weight and low centre of gravity

The sportier positioning of the new SL also suggested the decision for an electric soft top instead of the previous metal vario roof. The 21-kilogram reduction in weight and the resulting lower centre of gravity have a positive effect on driving dynamics and handling. The space- and weight-saving Z-fold makes it possible to dispense with a conventional soft-top compartment cover. The front roof cap ensures that the open soft top is flush with the surface in its final position. At the same time, the developers were faced with the task of maintaining the high suitability for everyday use and the exemplary noise comfort. The three-layer design consists of a tightly stretched outer shell, precisely crafted roof liner and the acoustic mat made of high-quality 450 g/m² material inserted in between.

Opening and closing takes only about 15 seconds and is possible up to a speed of 60 km/h. The soft top is operated using the switch panel in the centre console or the multimedia touchscreen, on which an animation shows how the process is progressing.

Engine, transmission and all-wheel drive: great variety and more choice than ever before

At market launch, the new SL starts with two output levels of the AMG 4.0-litre V8 biturbo engine. The engines are assembled purely by hand at the company's site in Affalterbach according to the "One Man, One Engine" principle. In the top model SL 63 4MATIC+ (combined fuel consumption 12.7-11.8 l/100 km, combined CO₂ emissions 288-268 g/km)¹ the engine develops 430 kW (585 hp) and provides a maximum torque of 800 Nm over a wide rev range from 2500 to 4500 rpm. Accelerating from 0 to 100 km/h takes only 3.6 seconds, the top speed is 315 km/h. In the SL 55 4MATIC+ (combined fuel consumption 12.7-11.8 l/100 km, combined CO₂ emissions 288-268 g/km), the V8 unit develops an output of 350 kW (476 hp) and a peak torque of 700 Nm. The sprint from standstill to 100 km/h takes 3.9 seconds, the top speed is 295 km/h.

For use in the SL, the engine received a new oil pan, repositioned intercoolers and active crankcase ventilation. The intake and exhaust ducts have been optimised for even more effective gas exchange, and the exhaust gas routing for the catalytic converter box and petrol particulate filter has been enlarged. The developers achieved the increased output of the SL 63 4MATIC+ primarily through higher boost pressure and greater air flow, as well as modified engine software. To sum up, the eight-cylinder engine thrills with its exceptional power delivery and powerful acceleration in all engine speed ranges combined with maximum efficiency for low consumption and emission values.

Performance hybrid in development

At a later date, we will also offer the SL as a powerful Performance hybrid drive. The AMG E PERFORMANCE drive strategy is based on the guiding principle of offering an electrified powertrain that further enhances driving dynamics while also being highly efficient.

Wet start-up clutch for the transmission

The AMG SPEEDSHIFT MCT 9G transmission combines an emotionally appealing gearshift experience with extremely short shift times and is specially adapted to the requirements of the new SL. A wet start-off clutch replaces the torque converter. It reduces weight and, thanks to its lower inertia, optimises response to accelerator pedal commands, especially during spurts and load changes.

More traction and handling stability: fully variable AMG Performance 4MATIC+ all-wheel drive

For the first time in its almost 70-year history, the SL is available with a drive system acting on all four wheels. The two V8 models are equipped with AMG Performance 4MATIC+ all-wheel drive technology as standard. This intelligent system combines the advantages of different drive concepts: the fully variable torque distribution to the front and rear axles ensures optimal traction right up to the physical limit. The driver is also

¹ Technical data on power, torque, mileage, fuel consumption and emissions in this publication are provisional and have been determined internally in accordance with the applicable certification method. Confirmed TÜV figures, EC type approval and certificate of conformity with official figures are not yet available. Differences between the stated figures and the official figures are possible.

able to rely on high handling stability and a high level of safety under all conditions.

Suspension and brakes: Multi-link front axle, active anti-roll stabilisation and optimal deceleration

The SL 55 4MATIC+ is equipped as standard with a newly developed AMG RIDE CONTROL steel suspension with particularly capable aluminium shock absorbers and lightweight coil springs. For the first time, a series-production Mercedes-AMG vehicle is fitted with a multi-link front axle with five links arranged entirely within the rim. This significantly improves the kinematics. At the rear axle, a 5-link design likewise controls the wheels.

The innovative AMG ACTIVE RIDE CONTROL suspension with active, hydraulic anti-roll stabilisation makes its début in the SL 63 4MATIC+. Biggest innovation: Active hydraulic elements replace the conventional mechanical anti-roll bars and compensate for rolling movements of the new SL in fractions of a second. The system enables optimal steering and load-change behaviour with AMG-typical driving characteristics in terms of dynamics, precision and feedback for the driver. At the same time, it increases ride comfort when driving in a straight line and over bumps.

The newly developed AMG high-performance composite braking system guarantees excellent deceleration values and precise control. It impresses with short braking distances, sensitive response and high stability - even under extreme stress. The new composite brake discs are lighter than before and take up less space, which is used for even better brake cooling. The directional perforation is also new: In addition to the additional weight saving and better heat dissipation, this solution scores points with a faster response in wet conditions as well as better pad cleaning after braking manoeuvres.

Active rear-axle steering: combines agility and stability

For the first time in its long history, the SL is equipped with active rear-axle steering as standard. Depending on the speed, the rear wheels steer either in the opposite direction (up to 100 km/h) or in the same direction (faster than 100 km/h) as the front wheels. The system thus enables both agile and stable handling - characteristics that are in contrast to each other without rear-axle steering. Other advantages include easier vehicle control at the limits and less steering effort because the front-wheel steering ratio is more direct.

Six driving modes and AMG DYNAMICS: from comfortable to dynamic

The six AMG DYNAMIC SELECT driving modes "Slippery", "Comfort", "Sport", "Sport +", "Individual" and "RACE" (standard for SL 63 4MATIC+, included in the optional AMG DYNAMIC PLUS package for SL 55 4MATIC+) enable a wide spread of vehicle characteristics from comfortable to dynamic. The individual driving modes offer an individual driving experience, precisely tailored to different driving conditions. As a feature of the AMG DYNAMIC SELECT driving modes, the SL models also feature AMG DYNAMICS. This integrated vehicle dynamics control extends the stabilising functions of ESP® with agility-enhancing intervention in the all-wheel control, steering characteristics and additional ESP® functions. When cornering at speed, for example, brief braking intervention at the inner rear wheel generates a defined yawing motion around the vertical axis for responsive and precise entry into the bend. The spectrum ranges from extremely stable to highly dynamic.

SL range of equipment: great variety for an individual appearance

The equipment details and the numerous options offer a wide range of individualisation for the most diverse customer wishes - from sporty-dynamic to luxurious-elegant. Twelve paint colours including the two exclusive SL paints Hyper Blue metallic and MANUFAKTUR Monza Grey magno, three roof colour variants and numerous new wheel designs make the choice a pleasure. Three exterior design packages are available to further sharpen the look and make it either more elegant or more dynamic. The SL 55 4MATIC+ runs on 19-inch AMG multi-spoke alloy wheels as standard, optionally in silver or matt black. The SL 63 4MATIC+ sits on 20-inch AMG 5-twin-spoke alloy wheels. The range of wheels includes a total of nine different variants. They include two aerodynamically optimised 20-inch options in 5-twin-spoke or multi-spoke design. The range is rounded off with 21-inch AMG alloy wheels in a 10-spoke design and 21-inch AMG forged wheels in a 5-twin-spoke

design, both in two colour variants.

Driving assistance systems and MBUX: intelligent helpers in the background

With the help of numerous sensors, cameras and radar, the driving assistance systems observe the traffic and the surroundings of the new roadster. If necessary, the intelligent helpers can intervene at lightning speed. As in the current generations of the Mercedes C-Class and S-Class, the driver is supported by numerous new or enhanced systems - in everyday situations, for example, by assistance for speed adaptation, distance control, steering and lane changes. When danger threatens, the assistance systems are able to respond to impending collisions as the situation demands. The functioning of the systems is visualised by a new display concept in the instrument cluster.

The new assistance display in the instrument cluster shows comprehensibly and transparently how the driving assistance systems work in a full-screen view. The driver can see their car, lanes, lane markings and other road users such as cars, trucks and two-wheelers in an abstracted 3D way there. The system status and operation of the assistants are visualised in this depiction of the surroundings. The new animated assistance display is based on a 3-D scene generated in real time. This dynamic, high-quality representation makes the operation of the driving assistance systems transparent as a tangible augmented reality experience.

Numerous connectivity services available

The MBUX (Mercedes-Benz User Experience) infotainment system enables extensive intuitive operating options and many digital services from Mercedes me connect. Its strengths include the intuitive operating concept via touchscreen or touch control buttons on the steering wheel, smartphone integration of Apple CarPlay and Android Auto, hands-free system via Bluetooth connection, and digital radio (DAB and DAB+). In conjunction with MBUX, customers already have access to connectivity services such as Live Traffic Information. With Mercedes me connect, however, the new SL becomes even more intelligent overall: Additional functions can be used before and after the journey or while on the road. All that is required is to link the roadster to a Mercedes me account in the Mercedes me portal and accept the terms of use. Thanks to navigation with Live Traffic Information and Car-to-X communication, the customer drives with real-time traffic data. This way, traffic jams can be avoided efficiently and valuable time can be saved. Car-to-X communication enables connected vehicles to exchange information about traffic events.

Interesting facts & figures

The new Mercedes-AMG SL at a glance

The new dimensional concept with **2+2 seats** enables muscular proportions and improves everyday practicality.

The new SL was created on an all-new **roadster architecture** with a composite aluminium structure. No part of the body shell was adopted from the predecessor or any other model series.

For **the first time** in 70 years, the SL is **available with all-wheel drive**: AMG Performance 4MATIC+ distributes the drive force fully variably to the front and rear wheels.

The **AMG ACTIVE RIDE CONTROL** active anti-roll stabilisation works without anti-roll bars and brings benefits in terms of driving dynamics and comfort.

Rear-axle steering combines agility and stability and is also on board for **the first time** in an SL.

Two AMG V8 engines at launch. Further engine versions will follow, including as powerful **E PERFORMANCE hybrid**.

The electro-hydraulic **soft top** opens or closes fully automatically in around **15 seconds**, and both are possible up to 60 km/h.

The multimedia touchscreen can be electrically adjusted in inclination from **12 to 32 degrees**.

"Hey Mercedes", the intelligent voice assistant, understands up to **28 languages**.

At the market launch, the new SL is available in **twelve paint** finishes, including **five** metallic paint finishes, **and six** MANUFAKTUR colours as well as **three** different soft top colours.

Digitalisation - **eight screen designs** can be displayed in the head unit

Balanced design with sporty genes

The new Mercedes-AMG SL: the exterior design

The new SL combines the best of both worlds in its exterior design: the Mercedes-Benz design philosophy of sensual purity, combined with the sporty genes of AMG. Characteristic details such as the power bulges on the bonnet respectfully cite the long SL tradition. The balanced design simultaneously offers more function and space in the interior than before. The interplay of light and shadow makes the overall appearance visually light. Every detail conveys value and exclusivity. The muscular proportions signal at first glance that the new SL has returned to its sporty roots.

"SL" - an abbreviation standing for "Super" and "Light" - quickly became a legend due to the motorsport successes of the Mercedes-Benz 300 SL, which was unveiled in 1952. From 1954, the 300 SL series sports car (W 198) with its distinctive Gullwing doors, derived from the racing car, significantly increased its appeal further. Other highlights of the model history: the "Pagoda" (W 113, 1963-1971), the evergreen R 107 (1971-1989), which was built for 18 years, or its successor, the R 129, which is regarded as an automotive sculpture with its striking wedge shape. In the decades-long development history from full-blooded racing car to open-top luxury sports car, the new Mercedes-AMG SL now sets another milestone. It combines the sportiness of the original SL with the unique luxury and technological excellence that characterise modern Mercedes models.

The enlarged dimensional concept with 2+2 seats offered the designers more freedom in their design possibilities. The long wheelbase, short overhangs and steeply raked windscreen with black-painted frame make the SL look compact and low. Hallmark SL proportions such as the long bonnet and the set passenger compartment set far back signal the appearance of a luxurious sports car that is also very suitable for everyday use. Flowingly modelled surfaces without beads or edges, right down to the recessed door handles, transport the unique spirit of the iconic SL into the future. When closed, the high-quality soft top underlines the light, purist impression. The voluminously sculpted wheel arches and the alloy wheels flush with the outer skin emphasise power and dynamism.

Front view: unmistakably SL, unmistakably Mercedes-AMG

The AMG-specific radiator grille characterises the powerful, wide front end. With its contour that widens at the bottom and its 14 vertical slats, it cites the ancestor of all SL models, the globally successful 300 SL racing sports car from 1952. In recent years, this radiator grille has become the most striking distinguishing feature of all new AMG models. In the new SL, it has a pronounced three-dimensional design and is positioned particularly low. This reinforces the dynamic impression.

The lower air intake gives the front section additional visual width. The front apron is characterised by the so-called jet wing: The large outer air intakes extend far towards the centre of the car and channel the airflow to the radiators with three vertical fins. Side air deflectors in high-gloss black allow air to flow around the vehicle in a targeted manner. The wide front splitter in silver chrome literally hovers just above the road as an additional aero element. The long and flat bonnet underlines the distinct AMG sports car genes. The two power bulges are further unmistakable citations of SL history.

Extremely slim, sharply outlined DIGITAL LIGHT LED headlamps give the new SL added presence. Precise graphics in the darkened interior of the headlamps emphasise the depth. The daytime running light signet with two bright light spots makes the SL unmistakable from a distance.

Side view: seamless, clear and solid surfaces

In the side view, the strongly pronounced vehicle shoulder in combination with the AMG alloy wheels lends a perfect balance of elegance and sportiness. The waisted side also emphasises the vehicle's power - especially through the strongly flared rear wheel arches. The precise detail design of the wing trim provides an accentuating contrast to the clear and solid surfaces, which remain seamless thanks to the recessed door handles.

The SL 55 4MATIC+ Roadster is fitted as standard with 9.5 J x 19 (front) and 11.0 J x 19 (rear) alloy wheels with 255/45 R 19 (front) and 285/40 R 19 (rear) tyres. On the SL 63 4MATIC+ the figures are 9.5 J x 20 (front) and 11.0 J x 20 (rear) with 265/40 R 20 (front) and 295/35 R 20 (rear) tyres. Numerous other designs from 19 to 21 inches in diameter are optionally available. The 20-inch AMG alloy wheels also feature aero elements. These enhance the roadster's C_d values and thus also improve consumption.

Rear view: low and powerful with integrated, active spoiler

The soft top in so-called Z-fold enables designing a low and powerful rear end. The active rear spoiler is integrated almost seamlessly into the boot lid. In combination with the wide track, the strong rounding of the rear end emphasises the width of the roadster. The narrow LED rear lamps define the rear view in an even more accentuated way. The design of the rear lamps takes up the shape of the headlamps. A bar signet and luminous dots stage the light unmistakably by day and by night.

Other characteristic design elements at the rear include the high-gloss black underbody diffuser with four vertical fins and integrated, newly designed twin tailpipe trim. At the same time, suitability for everyday use is not neglected: Thanks to the standard-fit Parking Package with reversing camera, the driver maintains situational awareness even in confusing circumstances.

High everyday suitability with 2+2 seats and "hyperanalogue" cockpit

The new Mercedes-AMG SL: the interior design

The interior of the new SL transforms the tradition of the first 300 SL Roadster into the modern era. With its Mercedes-AMG performance genes, the new edition serves the sporty target group as well as customers who are focused on maximum comfort. Fine materials, meticulous workmanship and attention to detail further underscore the high standard of luxury in the interior. The cockpit design, right up to the electrically adjustable central display in the centre console, is focused on the driver and captivates with a harmonious overall impression. The completely redesigned dimensional concept with 2+2 seats offers more function and space in the interior at the same time. The MBUX infotainment system offers a choice of several specific display styles and different modes.

The first 300 SL Roadster is one of the most famous automotive icons. Its minimalist and high-quality interior inspired the designers in creating the interior for the new Mercedes-AMG SL. For the new edition of the icon, they created a mix of analogue geometry and digital world - called "hyperanalogue". A good example of this is the fully digital instrument cluster, which is integrated into a three-dimensional visor.

"The interior of the new Mercedes-AMG SL pampers driver and passengers with sophisticated luxury. The new SL combines the highest levels of comfort and quality in its interior, coupled with just the right amount of sportiness. The high-quality combination of analogue world and state-of-the-art digital equipment makes it clear: the new SL is the rebirth of an icon for the modern era", says Philipp Schiemer, Chairman of the Board of Management at Mercedes-AMG GmbH.

"The SL is the icon of our brand: For decades, this roadster has stood for automotive fascination and desirability. This is a great opportunity and challenge for the design, because every designer wants to create icons", says Gorden Wagener, Chief Design Officer Daimler Group. The result is a revolutionary experience in the interior as a combination of digital and analogue luxury". We have created the most iconic SL ever, the luxury icon of the 2020s".

The new, highly sophisticated dimensional concept once again allows a 2+2 seating configuration for the first time since 1989 (Mercedes SL model series R 129). This makes the new SL even more versatile. The rear seats increase everyday usability and offer space for people up to 1.50 metres tall (up to 1.35 metres with a child seat). If the extra seating is not needed, a plug-in wind deflector behind the rear seats can protect front-seat passengers from draughts on the back of their necks. Or the second row of seats can be used as additional stowage space and accommodate a golf bag, for example.

Aviation-inspired instrument panel

The symmetrical instrument panel is designed as a sculptural, powerful wing and structured into an upper and lower section. Highlights include the four newly developed, galvanised turbine nozzles. Their surfaces merge into the instrument panel in the form of powerful power domes. The lower section of the instrument panel evolves fluidly from the centre console, seamlessly connecting the two elements.

Despite symmetry, the cockpit design creates a clear focus on the driver: The high-resolution 12.3-inch LCD screen of the instrument cluster is not designed to be free-standing, but integrated into a high-tech visor. This prevents reflections caused by sunlight.

Centre console with adjustable touchscreen

The centre console dominates the separation between driver and front passenger. Of maximum width and rising sharply towards the front, it flows into the lower section of the instrument panel. The functional and visual heart of the centre console is the metallic panel that penetrates the leather surfaces at the front and rear. With the NACA air intake signature, it carries on the genes of the AMG GT and GT 4-Door Coupé. This design element thus becomes a typical AMG style element in the interior. The NACA air intake transitions almost seamlessly into the 11.9-inch portrait-format multimedia touchscreen. To avoid disturbing light reflections caused by different sun positions when the soft top is open, the touchscreen can be electrically adjusted in its inclination from 12 degrees to 32 degrees. Its portrait format offers clear advantages, especially for navigation, as well as more leeway in terms of ergonomics. The touchscreen floats between the two central, high-quality air vents, which elegantly cite the history of the SL, as a digital contrast to emotive design elements.

The door panels are integrated into the balance of the interior

Similar to the centre console, the surfaces in the doors also develop fluidly from the instrument panel. The result is a gradient accentuated with decorative topstitching that frames the entire interior and runs past the turbine nozzles at the sides. The door centre panel is designed as a sensual layered topography. The pull handle is also designed in the same way as the centre console and is another eye-catching feature. The materiality and modelling of the surfaces are repeated in the doors, creating balance in the interior. High-quality Burmester loudspeakers in real metal, whose perforation pattern also stands out visually, are integrated into the doors.

Sculptural seat design with integrated headrests

The avant-garde, sculptural seat design of the standard, electrically adjustable AMG sports seats plays skilfully with layers and wrapping surfaces. This makes the seats appear lighter and less voluminous. The headrests are integrated into the backrest and thus contribute to the sporty proportions of the seat. Perfect ergonomics and various progressive seam and quilting patterns complete the symbiosis of high-tech, performance and luxury.

AMG performance seats optional

Even the standard sports seats offer a high level of lateral support in addition to excellent comfort. The optional AMG Performance seats with integrated head restraints are even sportier still. The seat bolsters of the optional multicontour seats automatically tighten in the Sport, Sport+ and RACE driving modes to ensure optimal lateral support at all times.

The large selection of different upholsteries also reflects the range from comfortable to performance-oriented features. Customers can choose from single or two-tone nappa leather, particularly elegant nappa STYLE leather with diamond quilting, or the sporty combination of nappa leather with DINAMICA RACE microfibre and contrasting topstitching in yellow or red. On request, inflatable air cushions and three massage programmes in the multi-contour seats for driver and front passenger ensure outstanding long-distance comfort. And the ENERGIZING Package Plus combines, among other things, seat functions such as massage and various lighting scenes to create stimulating or relaxing comfort programmes.

AIRSCARF comes as standard on the eight-cylinder models: Warm air flows into the passenger compartment from air outlets in the head restraints and wraps around the head and neck area of the driver and front passenger like a scarf. The temperature of the seat heating for driver and front passenger can be controlled separately for seat surfaces and seat backrests. In addition, a three-stage seat ventilation system is available.

AMG Performance steering wheel in twin-spoke design

The AMG Performance steering wheel with its seamlessly integrated buttons also offers tangible and visible added value. The three rounded twin spokes combine strength with lightness. The steering wheel rim, which is flat at the bottom and covered in nappa leather or nappa leather/DINAMICA microfibre, can be heated as an option. Also included is a sensor mat to detect "hands-on". If the driver does not have their hands on the steering wheel for a certain time, a warning cascade is started, which finally activates Emergency Brake Assist if the driver remains inactive.

Visual and technical highlights are the buttons, which are seamlessly integrated into the surfaces of the horizontal double spokes. Haptic sensing aids in the area of the symbols make control easier. The left sensor surface of the upper steering wheel spokes controls the instrument cluster, while the right sensor surface controls the media display. The lower spokes contain the controls for the cruise control/DISTRONIC (left) and telephone/hands-free system/volume control (right).

The two round, standard AMG steering wheel buttons impress with intuitive operation, brilliant, colour LCD displays and modern icons. This allows important driving functions and the driving modes to be controlled without having to take your hands off the steering wheel. They work by turning (the setting ring) or pressing (on the display button) as is widely known. The selected setting is shown on the display, which is directly integrated in the respective button. The AMG SPEEDSHIFT MCT 9G transmission can also be shifted precisely and quickly manually via the aluminium paddle shifters located on the left and right behind the steering wheel rim.

Intuitively operated and capable of learning: the latest-generation MBUX (Mercedes-Benz User Experience)

Some functional contents and the operating structure of the second-generation MBUX system correspond to those of the S-Class. They have been extensively supplemented or replaced by AMG-specific content and views. The five display styles Classic, Sport, Supersport, TRACK PACE and Discreet are available. The AMG-specific Supersport style offers the option of displaying various contents, for example current engine data, temperature data of various vehicle components, current vehicle settings as well as an audio/media menu. In addition, the other display styles were also adapted to the AMG requirements. This makes the new SL highly distinct in terms of communication and information. Exclusive menu items such as "AMG Performance" or "AMG TRACK PACE" emphasise the sporty character.

The stand-alone content reserved for the SL includes the staging of the soft-top opening and closing, race track settings, and different vehicle views depending on the model. In addition, there is the configuration of various driving parameters such as manual transmission shifting, vehicle sound, chassis settings, ESP® or active rear spoiler.

In the AMG Performance menu, the driver can call up a wide range of data at the touch of a finger on different tiles, from power, torque or lateral acceleration to the power distribution of all-wheel drive and the current vehicle status with tyre pressure and fluid temperatures. The attention to detail goes so far that even the wheel angles on the front and rear axles or the oil pressure in the active anti-roll stabilisation system can be read out.

The interior has become even more digital and intelligent, as hardware and software have been extensively enhanced. Brilliant images on the LCD screens make it easy to control vehicle and comfort functions. The driver's and central displays offer an aesthetically pleasing and holistically coordinated

experience. The appearance of the instrument cluster can also be personalised with different display styles and individually selectable main views.

Using the capacitive display button on the control bar below the central display, the driver selects various functions such as media volume, assistance systems, vehicle functions or the appropriate driving mode from "Comfort" to "RACE".

The optional head-up display contributes to relaxed driving, as the driver does not need to take their eyes off the road. It displays relevant cues and actions three-dimensionally in the real driving situation and surroundings. Here, too, there is a choice of several style variants. Depending on the equipment or personal taste, the ambient light frames the exclusive interior in 64 different colours. The "Discreet" display style is coupled to the ambient light. A total of seven background colours are available here, each of which is assigned to one of the 64 colours. Among them are two exclusive AMG background colours.

AMG TRACK PACE: Data logger for use on the race track

AMG TRACK PACE, the virtual race engineer, is on board as standard for the SL 63 4MATIC+ and optionally available for the SL 55 4MATIC+. The software is part of the MBUX infotainment system and records more than 80 vehicle-specific data (for example speed, acceleration, steering angle, brake pedal actuation) ten times per second while driving on a race track. On the "Telemetry" screen, 40 parameters can be displayed live, of which up to four - individually selected by the driver - can be displayed simultaneously.

This is complemented by the display of lap and sector times on the multimedia display, head-up display and in the instrument cluster, as well as additional training and analysis tools. Selected race tracks such as the Nürburgring or Spa-Francorchamps are already stored, and it is also possible to record your own tracks. The race navigation in the head-up display shows cornering angles and braking points to help you find the racing line. The augmented reality function of MBUX also allows the racing line of a saved recording to be displayed on the multimedia display. In this way, the driver can improve their lap times as if with a virtual instructor. Acceleration and deceleration values can also be measured and stored.

With the Dash Cam option (not available in all markets), videos can also be recorded on a USB storage device using the HD camera integrated in the vehicle. Various data can be integrated into the recording as an overlay, for example lap and sector times, a mini-map of the track and vehicle-specific data such as speed, acceleration, steering angle or brake pedal actuation.

New roadster architecture with composite aluminium structure for maximum rigidity

The new Mercedes-AMG SL: the body shell

It began in 1952 with a filigree space frame, which in the first SL combined low weight with the highest possible torsional rigidity. This construction was conceived for its original use in motorsport and further developed to provide the backbone for the later production model in coupé and roadster form. The latest new edition of the roadster icon is based on a completely new vehicle architecture developed by Mercedes-AMG. The lightweight composite aluminium chassis offers the highest rigidity and the basis for precise driving dynamics, high comfort, optimal packaging and sporty body proportions.

The new roadster architecture consists of an aluminium space frame combined with a self-supporting structure. As with the first SL in 1952, it was literally created on a blank sheet of paper: Not a single component was adopted from the predecessor SL or any other model such as the AMG GT Roadster.

"Our development team in the body shell area was faced with an extremely appealing, but also challenging task: When we were tasked to do the overall development of the new SL, we were able to start from scratch, so to speak, without building on an existing structure. We can be justifiably proud of the result and it proves once again the high level of engineering expertise in Affalterbach. Because on the one hand, we have managed to meet the high package demands. On the other hand, we were able to achieve excellent rigidity values with a favourable weight in all areas, thus laying the foundation for agile driving dynamics, high comfort and maximum safety", says Jochen Hermann, Chief Technical Officer of Mercedes-AMG GmbH.

The demands on the body shell architecture of the new SL were high: the specifications demanded a much more comprehensive performance scope than for the predecessor model series. In particular, the basic layout with 2+2 seats and the alignment with a large variety of drives presented the developers with completely new challenges in terms of complexity. The aim was to represent the driving performance typical of the Mercedes-AMG brand as well as to meet the high standards on comfort and safety of a Mercedes-Benz.

Intelligent material composition with high aluminium content and new fibre composites

The intelligent material mix of aluminium, steel, magnesium and fibre composites enables the highest possible rigidity at a low weight. Optimised material cross-sections and sophisticated component designs create space for the required comfort and safety features, the sophisticated technology and the soft top. Other targeted measures include aluminium thrust panels on the underbody and function-integrated struts at the front and rear. The instrument carrier made of magnesium and the cover bridge made of a fibre composite material with a mixture of glass fibres and carbon also demonstrate the engineers' striving for the best possible mix of materials. This also applies to the windscreen frame made of high-strength, hot-formed tubular steel. This serves as roll-over protection in conjunction with a roll bar system behind the rear seats that can be extended at lightning speed when needed.

Cast components with tailor-made wall thicknesses

Cast aluminium components are used at the nodal points where forces come together or where functions are highly integrated, i.e. where large forces have to be transferred. Cast components have the advantage of enabling the specific discharge of forces, and make it possible to vary wall thicknesses locally according to the loads encountered. This makes it possible to realise higher rigidities that are

required at certain points, for example at the chassis mounts. In addition, only the required wall thickness is implemented at each point of the component. This saves weight in less stressed areas.

Compared to the previous model series, the torsional stiffness of the body shell structure has increased by 18 percent. The transverse rigidity, for example, is 50 percent higher than the excellent value of the AMG GT Roadster, while the longitudinal rigidity is 40 percent higher. The likewise improved introduction rigidity for the chassis mounts guarantees very precise handling and high agility. The weight of the plain body shell without doors, bonnet and boot lid is around 270 kilograms.

The entire vehicle concept is designed to keep the centre of gravity as low as possible. This applies both to the low connection of the drivetrain and axles and to the arrangement of the rigidity-relevant components in the body shell structure. Examples of this are the connections between the front and rear sections and the passenger safety cell, with their high flexural strength and torque rigidity, systematically realised via force paths that are as low as possible.

Quality and processing at the highest level

Modern joining methods such as MIG welding, laser welding, punch riveting, blind riveting, MIG soldering, bonded seams or flow-drilling screws and, of course, high-precision toolmaking raise the body shell quality to top level. This applies equally to gap dimensions and to radii or joint runs. It goes without saying that the new Mercedes-AMG body shell architecture meets all internal crash requirements, which are significantly stricter than legal requirements in many areas.

Despite the high quality standard, the chassis development was implemented in the shortest possible time thanks to maximum efficiency: It took less than three years from the time a team of initially just six people was tasked with the job to the approval for series production. The high quality of the software used in the digital development made it possible to give the go-ahead for the production of the series-production tools without a real chassis prototype. And the so-called structural validation vehicle, which is of immense importance for passive accident safety, already met the demanding internal requirements during the first real crash test.

The new SL is manufactured at the Bremen site, where its predecessor already rolled off the production line.

Less weight and low centre of gravity

The new Mercedes-AMG SL: the soft top

The sporty positioning of the new SL also suggested the decision for an electric soft top instead of the previous metal vario-roof. The 21-kilogram reduction in weight and the resulting lower centre of gravity have a positive effect on driving dynamics and handling. At the same time, the developers were faced with the task of maintaining the high suitability for everyday use and the exemplary noise comfort.

This is achieved by a three-layer design with a tightly stretched outer shell, a precisely crafted roof liner and the acoustic mat inserted in between. It is made of high-quality 450 g/m² material and offers a high level of noise comfort.

The space- and weight-saving Z-fold makes it possible to dispense with a conventional soft-top compartment cover. The front roof cap ensures that the open soft top is flush with the surface in its final position. Two fully automatic linkage exit flaps to the right and left then close the gaps to the body. Each time they open and close, they perform an impressive ballet of movement. The entire process takes only about 15 seconds and is possible up to a speed of 60 km/h. The soft top is operated using the switch panel in the centre console or the multimedia touchscreen, on which an animation shows the progress of the soft top operation.

The roof spans over a weight-optimised steel-aluminium construction and contributes to the vehicle's low centre of gravity with its low weight. Two integrated, round aluminium cross beams serve as additional reinforcements. The outer cover is available in black, grey or red. For a good view to the rear, the rear window made of safety glass can be heated.

Variable fabric soft top compartment

Another innovation is the fabric soft top compartment. It is significantly lighter and more compact than, for example, a fixed sheet metal compartment and thus allows for a larger luggage compartment. Two golf bags fit perfectly in the 213-litre boot. The automatic residual luggage compartment partition, which is included in the optional Load Compartment Package, is particularly convenient. When the roof is closed, it slides up: This increases the load compartment volume to around 240 litres compared to the standard partition.

Thanks to HANDS-FREE ACCESS, the boot lid can be opened and closed fully automatically with a kicking motion of the foot below the bumper. The optional Load Compartment Package maximises flexibility and makes everyday life easier. For example, a variable loading floor, practical stowage nets in the boot, rear and passenger footwell, a folding box for shopping and a 12-volt socket are among the components.

Great variety and more choice than ever before

The new Mercedes-AMG SL: engine, transmission and all-wheel drive

At market launch, the new roadster starts with two output levels of the AMG 4.0-litre V8 biturbo engine. And for the first time in its history, the SL also transfers the power to the road with all-wheel drive.

In the top model SL 63 4MATIC+ (combined fuel consumption 12.7-11,8 l/100 km, combined CO₂ emissions 288-268 g/km) the engine develops 430 kW (585 hp) and provides a maximum torque of 800 Nm over a wide rev range from 2500 to 4500 rpm. The roadster's top engine thus conveys effortless superiority in every rev range. The acceleration from 0 to 100 km/h in 3.6 seconds illustrates this, as does the top speed of 315 km/h. In the Mercedes-AMG SL 55 4MATIC+ (combined fuel consumption 12.7-11.8 l/100 km, combined CO₂ emissions 288-268 g/km), the V8 engine delivers 350 kW (476 hp) and a peak torque of 700 Nm. The sprint from standstill to 100 km/h takes 3.9 seconds, the top speed is 295 km/h.

The further developed AMG 4.0-litre V8 engine still operates with biturbo charging, in which the two turbochargers are not located on the outside of the cylinder banks, but in between them in the cylinder-V. The advantages of the "hot inside V": a compact engine design, spontaneous response of the turbochargers and low exhaust emissions thanks to optimal airflow to the close-coupled catalyts.

To further improve response, turbochargers with twin-scroll technology are used. Here, the housing of the turbocharger is divided into two parallel flow channels. Combined with two separate exhaust ducts in the exhaust manifold, this makes it possible to control the exhaust gases on the turbine wheel separately. One duct is fed by the exhaust gases of the first and second cylinders of a cylinder bank, the other by the exhaust gases of the third and fourth cylinders. The aim is to prevent the individual cylinders from having mutually adverse effects on the gas cycle. This reduces the exhaust gas back-pressure and improves the gas exchange. The results are increased output owing to improved cylinder charging with fresh mixture, more torque at low revs and immediate response times.

Engine features also include weight-optimised pistons, an adapted air intake and intercooling system, as well as extensive software developments. The jet-guided direct petrol injection with piezo injectors, the all-aluminium crankcase, the 4-valve technology with camshaft adjustment, the air-to-water intercoolers, the alternator management, the ECO start/stop function and the gliding mode have been retained.

Special modifications for use in the SL

For use in the SL, the internally named M 177 engine received a new oil pan, repositioned intercoolers and active crankcase ventilation. The intake and exhaust ducts have been optimised for even more effective gas exchange and the exhaust gas routing for the catalytic converter box and petrol particulate filter has been enlarged. The developers achieved the increased output of the SL 63 4MATIC+ primarily through higher boost pressure and greater air flow, as well as modified engine software. To sum up, the eight-cylinder engine thrills with its exceptional power delivery and powerful acceleration in all engine speed ranges combined with maximum efficiency for low consumption and emission values.

In the SL 63 4MATIC+, the eight-cylinder engine features active engine mounts. The SL 55 4MATIC+ can be optionally equipped with this as part of the AMG DYNAMIC PLUS Package. The mounts solve the conflicting goals of achieving as soft a connection as possible to the powertrain for high comfort and as rigid a connection as possible for optimum driving dynamics, by steplessly and quickly adapting their rigidity to the respective driving conditions. These are liquid-filled rubber mounts. The vehicle sensors detect the respective driving situation as well as the resulting vibration behaviour of the engine and pass this information on to a control unit. It regulates the force with which the engine is coupled to the body and thus optimises the handling. For this purpose, a magnetic damper fluid is pressed through an annular gap of a coil in the mount. Differently high currents generate a magnetic force that regulates the flow and thus the engine mounts according to the information from the control unit.

Three cooling circuits for optimal thermal management

To ensure that the new Mercedes-AMG SL doesn't get too hot even when it's being pushed to the limit on race tracks, three cooling circuits are used to maintain an even temperature. The high-temperature circuit cools the AMG 4.0-litre V8 biturbo engine and the two exhaust gas turbochargers. It also supplies the heating heat exchanger for on-demand and comfortable temperature control of the interior. The mechanical water pump is positioned on the engine block to save space and is driven reliably and directly by the timing assembly, with a pinion on the camshaft meshing with the water pump gear. The pump circulates a total of 12.3 litres of coolant at up to four bar pressure and 400 litres per minute.

The three-tier main cooling module (high-temperature radiator, low-temperature radiator, condenser), the flange-mounted intake fan and the auxiliary intake radiator (for the high-temperature circuit) - which is installed "horizontally" for a low centre of gravity, among other things - are positioned centrally in front of the engine behind the large radiator shroud. This means that they can be optimally supplied with a large volume of air. Thermal management is influenced not only by the three-stage thermostat and the shut-off valve (when the engine is cold, the cooling circuit is stopped so that the engine comes up to operating temperature more quickly), but also by active aerodynamic elements such as the two AIRPANELS in front of the main cooling module or the active aerodynamic element in the front underbody.

With a volume of 7.2 litres, the low-temperature circuit is somewhat smaller. It serves the intercoolers, the AMG SPEEDSHIFT MCT 9G transmission and the engine control unit. The performance of the main radiator is supported by an auxiliary radiator in the left wheel arch. Indirect air-to-water intercooling has enabled the developers to ensure efficient charge air cooling for high performance even in difficult ambient conditions. The plastic air intake box is designed to allow maximal equal distribution of air across the pipes - with minimum pressure loss. The dimensioning of the charge air cooling components allows the charge air temperature to be kept at precisely defined values above the ambient temperature.

The third cooling circuit is responsible for the engine oil. The oil-to-water heat exchanger ("oil cooler") in the right wheel arch enables rapid heating of the oil. This has a positive effect on the service life of the engine and reduces consumption after a cold start. In addition, this circuit prevents the engine from overheating and thus being damaged. The external oil cooler is controlled by its own oil thermostat. The oil and water pipes are made of aluminium instead of steel, which helps to reduce weight.

Digital and smart assembly by hand: "One Man, One Engine"

The engine is assembled purely by hand. In the AMG engine factory at the Affalterbach site, the "One Man, One Engine" principle is combined with Industry 4.0 manufacturing methods. This is designed according to modern knowledge of ergonomics, flow of goods, quality assurance, sustainability and efficiency. Smart production is characterised by maximum flexibility, is transparent and highly efficient. It assures and improves the quality of the engines and production processes using digital technologies.

Short shift times, high efficiency: the AMG SPEEDSHIFT MCT 9G transmission

The AMG SPEEDSHIFT MCT 9G transmission (MCT = Multi-Clutch Transmission) is specially adapted to the requirements of the new SL. A wet start-off clutch replaces the torque converter. It reduces weight and, thanks to its lower inertia, optimises response to accelerator pedal commands, especially during spurts and load changes. The elaborately calibrated software ensures extremely short shift times and, if required, fast multiple downshifts and, thanks to the throttle blip function in the "Sport" and "Sport+" driving modes, delivers a particularly emotionally appealing gearshift experience. Here, defined ignition adjustments enable even faster gearshifts than in the other modes. In all modes moving off occurs in first gear in order to always guarantee a dynamic driving experience. There is also the RACE START function which ensures optimal acceleration from a standstill.

The highlights of the transmission include:

- Adaptation of the shift characteristics to the selected AMG DYNAMIC SELECT driving mode
- In manual mode "M", the transmission responds immediately and precisely to manual gearshift commands from the driver and implements the commands at lightning speed.

- The temporary M mode allows an immediate change to manual mode "M" – merely by using the paddle shifters
- Automatic throttle blipping function when downshifting: This effect is automatically active in the "Sport", "Sport+" and "RACE" driving modes (standard on the SL 63 4MATIC+).
- ECO start/stop function is automatically active in the "Comfort" driving mode.
- The "gliding" mode can be activated in the "Individual" driving mode.

Fully variable AMG Performance 4MATIC+ all-wheel drive

For the first time in its almost 70-year history, the SL is available with a drive system acting on all four wheels. The two V8 models are equipped with AMG Performance 4MATIC+ fully variable all-wheel drive as standard. This intelligent system combines the advantages of different drive concepts: the fully variable torque distribution to the front and rear axles ensures optimal traction right up to the physical limit. The driver is also able to rely on high handling stability and a high level of safety under all conditions: in the dry, in the wet or in snow. The transition from rear-wheel to all-wheel drive and vice versa takes place continuously on the basis of a sophisticated matrix that integrates the intelligent control into the entire vehicle systems architecture.

An electromechanically controlled clutch connects the permanently driven rear axle variably to the front axle. The best possible torque split is continuously computed according to the driving conditions and driver's input. This means that the new roadster can be driven continuously variably from traction-oriented all-wheel drive to pure rear-wheel drive. Alongside traction and lateral dynamics, the all-wheel drive also improves the longitudinal dynamics for even more powerful acceleration.

Performance hybrids with exclusive AMG concept

At a later date, Mercedes-AMG will also offer the SL with a powerful Performance hybrid drive. The AMG E PERFORMANCE drive strategy is based on the guiding principle of offering an electrified powertrain that further enhances driving dynamics while also being highly efficient. With the increase in performance due to the additional electric motor, the development team was also able to improve the efficiency of the entire vehicle in parallel - and achieve lower emissions as well as lower consumption.

Multi-link front axle and active anti-roll stabilisation

The new Mercedes-AMG SL: the suspension

The SL 55 4MATIC+ is equipped as standard with a newly developed AMG RIDE CONTROL steel suspension with particularly light and capable aluminium shock absorbers including adjustable damping and lightweight coil springs. For the first time, a series-production Mercedes-AMG vehicle is fitted with a multi-link front axle with five links arranged entirely within the rim. This significantly improves the kinematics. The independent wheel control and wheel suspension elements enable high lateral acceleration values with minimal drive influences on the steering system. At the rear axle, a 5-link design likewise controls the wheels. The SL 63 4MATIC+ also celebrates the première of the innovative AMG ACTIVE RIDE CONTROL suspension with active, hydraulic anti-roll stabilisation. The system enables even better turn-in and load change behaviour with typical AMG dynamics, precision and feedback for the driver. At the same time, it increases ride comfort when driving in a straight line and over bumps.

To reduce unsprung masses, all suspension links, steering knuckles and hub carriers on the front and rear axles of the new SL are made of forged aluminium. The multi-link concept controls each wheel with the least amount of elastic movement. The high camber and track stability not only enables high cornering speeds, it also provides the driver with optimal road contact at the high cornering limit. This is reflected in excellent lateral dynamics and driving stability at high speeds as well as in the good-natured reaction to external influences such as crosswinds, bumps or jumps in friction coefficients. An extremely direct connection of the shock absorber on the rear hub carrier reduces vibrations and undesirable wheel load fluctuations. Independent wheel control and wheel suspension elements enable high lateral acceleration with minimal torque steer – also a comfort feature.

The lightweight coil springs are a new development: Special tempering has reduced their weight without reducing their performance. In the manufacturing process, the spring pad is glued onto the spring for the first time. This firm connection prevents wear and tear caused by dirt such as sand in the course of a vehicle's life. The spring does not corrode over the life cycle, and the maximum component load can consequently be increased with less weight. This saves around 0.2 kilograms per spring.

Another lightweight construction measure concerns the torsion bar stabilisers on the front and rear axles of vehicles without active anti-roll stabilisation. Thanks to a variable wall thickness, their weight can be reduced. For this purpose, the primary material is tailored to the load in the vehicle by means of a special drawing process. The maximum wall thickness is now only used where it is required due to the maximum load, in this case in the area of the rubber mounts.

Even more comfort and sportiness: adaptive adjustable damping with two valves

The SL 55 4MATIC+ features the latest generation of AMG adjustable damping as standard. This system works with two so-called pressure relief valves per damper. With the help of these stepless control valves, a significantly larger damping force spread can be realised: one valve controls the rebound damping, i.e. the force that occurs when the wheel rebounds, and the other controls the compression damping when the wheel compresses. The rebound and compression stages are controlled independently of each other. In detail, this means that the so-called soft characteristic of the shock absorber was reduced and the hard characteristic of the shock absorber could be made even more pronounced. The body thus responds more sensitively to impacts and isolates inputs from the road. At the same time, the further refined control of the rebound valve and compression valve (stepless and independent of each other) stabilises the body in the best possible way. This technology makes it possible to increase comfort on the one hand, but also to make the driving dynamics even sportier on the other hand.

The suspension control unit analyses data - including data from the acceleration and wheel path sensors - to adjust the damping force for each wheel in a few milliseconds to suit the situation. By using the two adjustment valves, the damper is able to provide damping force adjustment across the full range of wheel

vibrations. Due to the special design of the valves, the damper reacts quickly and sensitively to changing road surfaces and driving conditions.

The driver can pre-select the basic set-up via the AMG DYNAMIC SELECT driving modes: at the touch of a button, the handling characteristics change, for example, from full dynamics in "Sport+" mode to smooth cruising in the "Comfort" setting. In addition, the tuning can be adjusted in three stages independently of the driving modes via a dedicated button.

For the first time in series production: AMG ACTIVE RIDE CONTROL with hydraulic, active anti-roll stabilisation

The SL 63 4MATIC+ features a completely newly developed hydraulic system, the innovative AMG ACTIVE RIDE CONTROL suspension, which is entering series production for the first time in a Mercedes-AMG model. Biggest innovation: Active hydraulic elements replace the conventional mechanical anti-roll torsion bars and compensate for rolling movements of the new SL in fractions of a second. For this purpose, the adaptive shock absorbers also have two hydraulic connections. One of them is on the compression side of the damper, the other on the rebound side. The connection of the damper chambers at all four wheels and the lines is made directly via the control valves of the adaptive dampers.

The intelligent hydraulic interconnection of the four suspension struts and the pressure regulation of the pump and switching valves allow a very wide roll rate with reduced roll movements at the same time. Figuratively speaking: Any torsion bar from zero to stiff can be realised automatically. In everyday life, this increases comfort because even one-sided bumps are individually compensated for. During dynamic cornering, the hydraulics also actively reduce loss of camber. Thanks to the resulting high camber stability, the roadster turns in very precisely.

When driving straight ahead, the system is opened completely depending on the driving mode and driving situation. The system compensates for individual obstacles that would otherwise lead to roll movements. Drivers and passengers experience a significantly more comfortable driving experience. The reduced roll when cornering pays equal dividends in terms of comfort and driving dynamics. The driving behaviour in the individual driving modes can also be spread even more between comfort and sport.

All dampers are hydraulically connected

The basic principle of the chassis is based on the fact that the compression or rebound sides of the individual dampers of the vehicle are interconnected. The compression stage of the front left damper is connected to the rebound stage of the front right damper via a hydraulic line. In addition, a line through the vehicle also connects to the compression side of the rear left damper and the rebound side of the rear right damper. Analogously, the other sides of the damper chambers are connected to each other via a second circuit. The simplified routings of the hydraulic lines each result in the shape of an "H".

In addition to the interconnection of the dampers, other components that are important for the function are used in the system. The rebound and compression sides of the dampers are directly connected via an electrically controlled 2/2-way valve, called a "comfort valve". A pressure accumulator is also attached to each of the damper compression sides. Both circuits are additionally connected to a central pump. It ensures that the hydraulic system pressure can be adjusted in both circuits. The connection between the pump and the circuits is made via 2/2-way valves. Pressure sensors are integrated downstream of the valves to monitor the system pressure in the respective lines. The possibility of freely selecting the system pressure opens up the degree of freedom to choose the size of the generated anti-roll support. The principle here is: The higher the system pressure, the greater the roll resistance to be expected.

The system works very efficiently as it uses the existing kinetic energy of the vehicle to positively influence the roll behaviour. The hydraulics of the AMG ACTIVE RIDE CONTROL suspension also feed the optional lift system for the front axle. If necessary, the front end lifts by 30 millimetres, making it easier to enter underground car parks or drive over speed bumps, for example. The lift system is operated via the multimedia central display or the AMG steering wheel buttons. The corresponding menu opens after pressing the area

with the vehicle symbol on the control bar. Among other things, a position at which the lift system is used can be stored using GPS technology so that the front end of the vehicle is raised automatically when it passes the corresponding point again.

Limited-slip rear differential for optimised handling stability

As standard, the SL 63 4MATIC+ features an electronically controlled limited-slip rear differential that ensures outstanding traction and maximum driving safety in all driving conditions. For the SL 55 4MATIC+ it is available as part of the optional AMG DYNAMIC PLUS Package. Not only is the traction of the drive wheels on the rear axle further improved - the cornering speeds at the limit also increase. In addition, handling stability is optimised when changing lanes at high speed. The system operates with a variable locking effect in acceleration and overrun mode, and is perfectly tuned to the various driving conditions and road surface friction coefficients.

AMG high-performance composite braking system for short braking distances

The newly developed AMG high-performance composite braking system guarantees excellent deceleration values and precise control. It impresses with short braking distances, sensitive response and last but not least with high stability and durability - even under extreme stress. Among the comfort features of the vehicle are Hill Start Assist, priming and dry-braking in the wet. With the ignition switched off and the vehicle at a standstill, the transmission automatically selects the parking position "P". Meanwhile, the electric parking brake releases automatically when pulling away.

The composite brake discs are particularly light: Driving dynamics and turn-in behaviour benefit from the reduced unsprung masses. Brake disc (made of cast steel) and brake disc chamber (made of aluminium) are now connected with special pins and no longer with screws as before. This design saves space, which is used for even better brake cooling. The directional perforation is also new: In addition to the weight saving and better heat dissipation, this solution scores points with a faster response in wet conditions as well as better pad cleaning after braking.

The two SL variants with V8 engine are fitted with vented and perforated composite brake discs measuring 390 x 36 millimetres with 6-piston fixed callipers at the front, and 360 x 26 millimetres with 1-piston floating callipers at the rear. The SL 55 4MATIC+ has red-painted brake callipers, while the SL 63 4MATIC+ has yellow callipers.

As an option, both SL variants can be fitted with the AMG ceramic high-performance composite braking system, with brake discs measuring 402 x 39 millimetres on the front axle and 360 x 32 millimetres on the rear axle. It saves even more weight compared to the standard brake. At the same time, the ceramic discs withstand even extreme loads and keep braking distances permanently short - ideal for use on the race track, for example. Thanks to the bronze finish of the brake callipers, they are also immediately recognisable as absolute high-performance components. All pads are copper-free and therefore more environmentally friendly.

Combines agility and stability

The new Mercedes-AMG SL: the active rear-axle steering

For the first time in its long history, the SL is equipped with active rear-axle steering as standard. Depending on the speed, the rear wheels steer either in the same or in the opposite direction as the front wheels. The system, which is precisely tuned to the new SL, thus enables both agile and stable handling. Other advantages include easier vehicle control at the limits and less steering effort because the front-wheel steering ratio is more direct at 12.8:1 (instead of 14.2:1 without rear-axle steering).

At the heart of the system are two electromechanical steering actuators (electric motors with spindle drive) that have no mechanical connection to the steering wheel. They replace the conventional control arms on the rear axle. This "by-wire" system adjusts the rear wheels within a predefined characteristics map by means of electronic control. The toe angle change is up to 2.5 degrees in one direction at the rear wheel.

Up to a speed of 100 km/h, the rear wheels turn in the opposite direction to the front wheels. This corresponds to a virtual shortening of the wheelbase. Advantage: The SL is much more agile when turning into bends, making it even more fun to drive and requiring less steering effort. Further benefits include increased manoeuvrability and a smaller turning circle in everyday driving situations - such as when making a turn or parking.

If the SL is travelling faster than 100 km/h, the system turns the rear wheels parallel to the front wheels (maximum steering angle then 0.7 degrees), corresponding to a virtual lengthening of the wheelbase and improving handling stability. At the same time, the lateral force on the rear wheels builds up considerably faster on changes of direction, thus speeding up the response to the steering.

The active rear-axle steering not only improves cornering, it also assists the driver in the event of sudden evasive manoeuvres and thus enhances active safety, making the SL easier to control at the limits.

The response is also dependent on the AMG DYNAMIC SELECT driving mode: In Sport+, for example, the rear-axle steering reacts even more agilely and directly at lower speeds. It also assists with optional automatic parking and the Remote Parking function. Later updates "over the air" are also possible.

Vehicle characteristics with wide spread

The new Mercedes-AMG SL: the driving modes

The six AMG DYNAMIC SELECT driving modes "Slippery", "Comfort", "Sport", "Sport +", "Individual" and "RACE" (RACE driving mode standard on S 63 4MATIC+, included in the optional AMG DYNAMIC PLUS Package on the SL 55 4MATIC+) enable a wide spread of vehicle characteristics from comfortable to dynamic.

Numerous relevant parameters are modified:

- Powertrain: Accelerator pedal characteristic, shift times and shift timing in the variants Reduced, Moderate, Sport or Dynamic
- AMG DYNAMICS: Agilisation functions such as all-wheel control, all-wheel drive, steering characteristics and ESP®; additional functions in Basic, Advanced, Pro or Master setting
- Exhaust system: sound and nature of the sound functions, Balanced or Powerful
- Suspension: in Comfort, Sport, Sport+

The individual driving modes offer an individual driving experience, precisely tailored to different driving conditions and driver preferences:

- "Slippery": optimal tuning for slippery and icy road conditions with reduced power application and flat torque curve. Smooth gear changes and earlier upshifting support the driving impression characterised by stability.
- "Comfort": comfortable and fuel-efficient driving, e.g. thanks to very early upshifts. Suspension and steering are set up for an emphasis on comfort. In addition, the ECO start/stop function is active here.
- "Sport": sporty character through more agile response to accelerator pedal commands, shortened shift times, earlier downshifts and the emotionalisation of gear changes through throttle blipping. A more dynamic suspension and steering set-up.
- "Sport+": extremely sporty characteristics thanks to an even more agile throttle response, increased acoustic emphasis on throttle blipping during downshifts as well as selective torque control on upshifts with cylinder suppression for optimal shift times. Increased idle speed for faster starting. An even more dynamic set-up for suspension, steering and powertrain.
- "RACE" (standard on SL 63 4MATIC+, optional as part of the AMG DYNAMIC PLUS Package on SL 55 4MATIC+): for highly dynamic driving on cordoned-off race tracks. In this mode, all the parameters are configured for maximum performance.
- "Individual": makes it possible to select and store individual parameters according to personal preferences. In addition, gliding mode is also available in the "Reduced" and "Moderate" drive settings.

AMG DYNAMICS: more agility with high stability

As a feature of the AMG DYNAMIC SELECT driving modes, the SL models have AMG DYNAMICS. This integrated vehicle dynamics control expands the stabilising functions of ESP® with agilising interventions in the all-wheel drive control, the steering characteristic, the control of the variable all-wheel drive system and in ESP® additional functions. When cornering at speed, for example, brief braking intervention at the inner rear wheel generates a defined yawing motion around the vertical axis for responsive and precise entry into the bend. The spectrum ranges from extremely stable to highly dynamic.

The AMG DYNAMICS symbol with the corresponding suffix is shown on the multimedia display when the driving modes are selected.

- "Basic" is assigned to the "Slippery" and "Comfort" driving modes. Here, the roadsters exhibit very stable handling with high yaw damping.
- "Advanced" is activated in "Sport" mode. The SL models remain neutrally balanced. The lower yaw damping, lower steering angle requirement and enhanced agility support dynamic manoeuvres such as driving on winding country roads.

- "Pro" (short for "Professional") belongs to the "Sport+" program. In "Pro" the driver receives even more assistance for dynamic driving manoeuvres while agility and feedback from the road when cornering are further enhanced.
- "Master" is coupled with the "RACE" driving mode (standard on SL 63 4MATIC+, optional as part of the AMG DYNAMIC PLUS Package on SL 55 4MATIC+): "Master" mode is aimed at drivers who want to experience dynamism and driving enjoyment on cordoned-off circuits. "Master" offers a vehicle balance with slight oversteer, a low steering angle requirement and more agile steering. In this way, "Master" ensures maximum agility and fully exploits the dynamic potential. To activate "Master" mode, the driver must use the separate button in the centre console to switch ESP® to ESP® SPORT handling mode or ESP® OFF.

In the "Individual" driving mode, drivers can set the AMG DYNAMICS levels "Basic", "Advanced", "Pro" and "Master" themselves.

Active aerodynamics for high balance and more efficiency

The new Mercedes-AMG SL: aerodynamics

A key development focus of the new SL was high aero efficiency. This means a perfect balance between low drag and reduced lift. Here, the luxurious roadster benefits from Mercedes-AMG's wide-ranging motorsport expertise. The extensive active aerodynamic elements at the front and rear are seamlessly integrated into the exterior design. Further detailed measures reduce the drag coefficient to C_d 0.31 - an excellent figure for open-top sports cars. The good aerodynamics reduce consumption and stabilise handling.

Driving stability, drag, cooling and wind noise: The SL's aerodynamics meet complex requirements. An even aerobalance can defuse critical driving situations, such as a sudden evasive manoeuvre at high speed. At the same time, it contributes to easier drivability, high efficiency and low wind noise.

The particular challenge with a roadster is to keep the aerobalance even, regardless of whether the top is up or down. The vehicle character and driving characteristics are to remain unchanged. In addition, the noise level should not vary too much when lowered side windows or the use of a wind deflector change the conditions.

The three-dimensionally modelled front apron with jet wing and front splitter not only reduces lift to the desired level, it also helps with the targeted inflow and outflow of the cooling modules. In addition, the cooling airflow from the aerodynamically shaped brake air ducts brings about a targeted improvement in braking performance. The large area of underbody cladding ensures an optimum exhaust airflow from the oil cooler in the underfloor area, and effective airflow to the rear diffuser.

Two-piece AIRPANEL air control system for the first time

Another technical highlight also improves the aerodynamics: the two-piece, active air control system AIRPANEL. The first piece operates with vertical louvres hidden behind the lower air intake in the front apron. The second piece is located behind the upper air intake and has horizontal louvres. All louvres are electronically controlled and can be opened and closed with actuators to direct the airflow as needed, improving aerodynamic performance.

Normally the louvres are closed - even at top speed. This position reduces drag and allows air to be directed specifically towards the underbody to further reduce front lift. Only when certain temperatures are reached on predefined components and the demand for cooling air is particularly high do the louvres open (the second piece only from 180 km/h) and allow maximum cooling air to flow to the heat exchangers. This calls for highly intelligent and fast control.

Active rear spoiler with intelligent operating strategy

The same applies to another active component of the aerodynamics: the retractable rear spoiler seamlessly integrated into the vehicle silhouette. It changes its position depending on the driving status. In doing so, the control software takes into account numerous parameters: It factors the driving speed, the longitudinal and lateral acceleration and the steering speed into the calculation.

The spoiler assumes five different angular positions from 80 km/h to either optimise handling stability or reduce drag. If the system detects driving dynamics, the spoiler moves to the steepest position, ensuring a driving experience that is both dynamic and safe.

- Position 0 (retracted), -11-degree angle, 0-80 km/h: The rear spoiler, fully integrated into the design of the rear lid, enables the clean look when stationary and at low speeds. When parked, the positioning mechanism is protected against dirt and foreign bodies.
- Position 1, +6-degree angle, 80-140 km/h: In this position, the new SL has the lowest drag (lower than in position 0), for the best possible efficiency and low consumption.

- Position 2, +11-degree angle, 140-160 km/h: optimal balance between low drag and handling stability from the medium road speed range.
- Position 3, +17-degree angle, 160 km/h - top speed: optimal balance between low drag and handling stability right up to the vehicle's top speed.
- Position 4, +22-degree angle, Dynamic Position, 120 km/h - top speed, with high dynamic driving recognised by the vehicle: maximum lateral dynamics with greatest possible downforce providing for the best-possible road-holding. Simultaneously the greatest driving stability. The spoiler can also extend into this position independently of the driving situation when the driver presses the display button on the steering wheel.

Added downforce and efficiency: the optional Aerodynamics Package

This package not only sharpens the look: Larger flics on the front and rear bumpers, a larger rear diffuser and an active aerodynamic profile in the underbody in front of the engine significantly improve the aerodynamic characteristics - both downforce and drag. This improves driving characteristics at high speeds, especially lateral acceleration, handling stability, braking stability and efficiency. The speed thresholds of the rear spoiler vary with the Aerodynamics Package. The rear spoiler extends 10 km/h earlier in positions 1 and 2 and offers improved balance with a steeper angle of 26.5 degrees in the Dynamic Position.

Active aerodynamics profile in the underbody

As part of the optional Aerodynamics Package, the active aerodynamic profile, which is almost invisibly hidden in the underbody in front of the engine, contributes significantly to improved handling. The carbon element, which weighs only around two kilograms, reacts to the position of the AMG DYNAMICS and automatically extends downwards by around 40 millimetres at a speed of 100 km/h in Basic/Advanced or 80 km/h in Pro/Master. This significantly changes the airflow at the underbody. This process results in what is known as the Venturi effect, which additionally "sucks" the car onto the road and reduces the front-axle lift by around 50 kilogrammes at 250 km/h. The driver feels this positively in the steering even at lower speeds: The SL can be steered even more precisely into bends and tracks even more stably. Especially when turning in quickly and under high lateral acceleration, the roadster delivers far more agile response and always remains easy to control. In addition, the drag coefficient is improved.

When the electrically driven profile extends, the exhaust air opening of the engine radiator in the front opens at the same time and directs the airflow specifically toward the rear diffuser. This means that the flow to it is optimised. This also increases the driving stability of the rear axle and reduces the temperature level of the hotspots in the rear area. At the same time, the aerodynamic refinements of the new SL ensure optimised brake cooling by directing the cold air specifically to the wheel discs. To protect against damage, the active component is spring-mounted and can therefore easily deflect upwards in the event of bumps.

In addition, the active element enhances the effect of the AIRPANEL active air control system: if the adjustable shutters are closed, the lift at the front axle is further reduced. The aerodynamic profile on the underbody can be extended when the vehicle is stationary (to clean it of leaves, for example) and is then automatically retracted when the vehicle moves off. When the speed threshold is reached, the profile extends again automatically.

Aero wheels reduce drag and weight

There is also a choice of aerodynamically optimised 20 or 21-inch diameter alloy wheels for the SL, which reduce drag through less turbulence. Particularly sophisticated are 20-inch wheels with plastic aero rings that also save weight.

The SL's low wind noise contributes significantly to the hallmark Mercedes long-distance comfort. Effective sealing systems and sophisticated aero-acoustics ensure a high level of day-to-day suitability. The anti-soiling measures for the exterior mirrors, side windows and rear window make an important contribution to active safety.

A wide range of design options for an individual appearance

The new Mercedes-AMG SL: equipment and appointments

The equipment items and the numerous options offer a wide range of possibilities for individualising the new SL - from sporty and dynamic to luxuriously elegant. Twelve paint colours including the two exclusive paints hyper blue metallic and MANUFAKTUR monza grey magno, three roof variants, numerous new wheel designs in sizes 19 to 21 inches and various exterior design packages make the choice a pleasure.

Mercedes-AMG is offering the new SL in twelve attractive paint finishes at its market launch. In addition to the non-metallic sun yellow, the range also includes the particularly exclusive MANUFAKTUR paint finishes. In addition, there are the metallic paint finishes high-tech silver, obsidian black, selenite grey, spectral blue and hyper blue, which is reserved exclusively for the SL. Another exclusive paint finish is MANUFAKTUR monza grey magno. The colour range is rounded off by MANUFAKTUR alpine grey non-metallic, MANUFAKTUR opalite white bright, MANUFAKTUR opalite white magno, MANUFAKTUR patagonia red metallic and MANUFAKTUR spectral blue magno. All paint colours can be combined with a black, red or grey fabric soft top.

The SL 55 4MATIC+ is fitted as standard with 19-inch AMG multi-spoke alloy wheels, optionally in silver or matt black, while the SL 63 4MATIC+ is fitted with 20-inch AMG 5-twin-spoke alloy wheels. The range of wheels comprises a total of nine different variants. These include two aerodynamically optimised 20-inch options in 5-twin-spoke or multi-spoke design. The range is rounded off with 21-inch AMG alloy wheels in a 10-spoke design and 21-inch AMG forged wheels in a 5-twin-spoke design, both in two colour variants.

Exterior design packages for an even more elegant or sporty look

Three exterior design packages are available for the new SL to further sharpen the look make it either more elegant or more dynamic.

- The AMG Exterior Chrome Package contains elegant high-gloss chrome accents on the front apron, the side sill trim and the rear.
- In the AMG Night Package, selected exterior elements are finished in high-gloss black, such as the front splitter, the side sill trims, the mirror caps and the trim element in the rear diffuser. Added to this are darkened tailpipe trims. Depending on the chosen paint finish, this results in striking contrasts or flowing transitions.
- The AMG Night Package II also includes further elements in high-gloss black, including radiator trim, typography and Mercedes star at the rear.
- With the AMG Exterior Carbon Package, lightweight components made of carbon fibre are reminiscent of the SL's motorsport history. The carbon parts include the front splitter, the exterior mirror housings and the diffuser at the rear. Added to this are tailpipe trims in high-gloss black.

AMG DYNAMIC PLUS Package for maximum driving pleasure

The AMG DYNAMIC PLUS Package is available as an option for the SL 55 4MATIC+ (included as standard in the SL 63 4MATIC+). It bundles numerous high-performance components - for maximum driving pleasure with impressive agility:

- Dynamic AMG engine mounts connect the engine more rigidly or more flexibly to the body, depending on the driving situation. In every driving situation, this results in the best possible balance between driving dynamics and comfort.
- The electronically controlled AMG limited-slip rear differential distributes the required power even more quickly and precisely between the wheels during dynamic cornering and rapid acceleration, thus guaranteeing maximum traction.
- The "RACE" driving mode delivers race track performance at the touch of a button with even more spontaneous engine response and a more direct accelerator pedal characteristic. Selectable as an additional driving mode via the AMG steering wheel buttons.
- The lowering by ten millimetres lowers the vehicle's centre of gravity and additionally stabilises the vehicle.

- The yellow-painted AMG brake callipers visually underline the increased driving dynamics potential.

Elegant ambience in the interior for relaxed and comfortable travel

In the interior of the new SL, high-quality materials and selected colour harmonies ensure a luxurious ambience with a high feel-good factor. Standard on the V8 models, nappa leather is available in black, sage grey/black, red pepper/black and sienna brown/black. The optionally available upholstery in MANUFAKTUR macchiato beige/titanium grey or in MANUFAKTUR truffle brown/black provides a particularly exclusive touch. The AMG Performance seats can also be upholstered in a combination of nappa leather and DINAMICA microfibre with yellow or red topstitching.

To match, the trim elements and centre console can be finished in aluminium or carbon as well as MANUFAKTUR chrome black in addition to the standard high-gloss black. The AMG Performance steering wheel with steering wheel heating as standard is available in nappa leather and nappa leather/DINAMICA microfibre.

Mercedes-AMG key with convenient KEYLESS-GO functions

Both model variants of the new SL feature KEYLESS-GO with flush-mounted door handles as standard. As soon as the electronic key is in the immediate vicinity of the vehicle (approximately one metre in radius), the vehicle electronics communicate with the key via antennas. If the code matches, the vehicle recognises its owner and unlocks. Another advantage is that the SL cannot be locked while the electronic key is in the vehicle. The vehicle can be locked either actively using the key or by pressing the button on the driver's or passenger door handle. The starting process is also conveniently carried out without an ignition key. The engine starts as soon as the start/stop button to the right of the steering wheel is pressed while the brake pedal is depressed.

The high comfort standards of the new Mercedes-AMG SL are underlined by standard equipment details such as the Wireless Charging System, i.e. a wireless charging option for compatible smartphones that comply with the so-called Qi standard. The corresponding surface for inductive charging sits in the stowage compartment in the centre console, and details of the charging process are displayed on the touchscreen.

Helpers in the background

The new Mercedes-AMG SL: the driving assistance systems

With the help of numerous sensors, cameras and radar, the driving assistance systems monitor the traffic and the surroundings of the new roadster. If necessary, they can intervene at lightning speed. As in the new generations of the Mercedes C-Class and S-Class, the driver is supported by numerous new or enhanced systems. This means that in everyday situations the driver is able to drive more safely as the result of being relieved during speed adaptation, distance control, steering and lane changes. When danger threatens, the assistance systems are able to respond to impending collisions as the situation demands. The functioning of the systems is made visible by a new display concept in the instrument cluster.

The new assistance display in the instrument cluster shows comprehensibly and transparently how the driving assistance systems work in a full-screen view. The driver can see their car, lanes, lane markings and other road users such as cars, trucks and two-wheelers in an abstracted 3D way there. The system status and operation of the assistants are visualised in this depiction of the surroundings. The new animated assistance display is based on a 3-D scene generated in real time. This dynamic, high-quality representation makes the operation of the driving assistance systems transparent as a tangible augmented reality experience.

The following are the most important innovations of the systems in the new SL:

ATTENTION ASSIST

This system included as standard is able to recognise typical signs of drowsiness and driver inattention, and displays a warning message prompting them to take a break.

Active Distance Assist DISTRONIC

This intelligent system can automatically maintain the preselected distance to vehicles ahead on all road types - motorway, country road and in the city. New features:

- Collision-preventing response to stationary road users at up to 100 km/h (previously 60 km/h)
- Selection of the DISTRONIC dynamics in MBUX, independently of DYNAMIC SELECT

Active Steering Assist

This helps the driver to stay in lane at speeds up to 210 km/h. New features:

- Lane detection additionally with 360-degree camera,
- Significantly improved availability and performance on bends on country roads
- Improved lane centring on motorways
- Situation-specific off-centred driving (e.g. formation of an emergency corridor, but also orientation using the edge of the carriageway on country roads without centre markings).

Traffic Sign Assist

In addition to conventionally signposted speed limits, this recognises overhead gantries and signs at roadworks. New features:

- Stop sign warning function - warning when about to run a stop sign
- Red traffic light warning function - warning when about to run a red traffic light.

Active Lane Keeping Assist

In a speed range of 60 to 250 km/h, Active Lane Keeping Assist uses a camera to detect when road markings or road edges are crossed, helping the driver to avoid leaving the driving lane unintentionally. The system also intervenes if there is a danger of collision with detected road users in the adjacent lane, e.g. with overtaking or oncoming vehicles. New features:

- The reaction to edges of the carriageway, for example a grass verge,
- Particularly intuitive steering intervention

- Adjustment of sensitivity via a menu (early, medium, late)

Active Lane Change Assist

Active Lane Change Assist cooperatively assists the driver in changing to the adjacent lane. The lane change to the left or right is only supported if, according to the sensor system, the adjacent lane is separated from your own by a broken lane marking and no vehicles have been detected in the relevant safety zone. New features:

- the longer search phase (15 seconds instead of 10 seconds, depending on the country) in which the lane change can take place, and
- the higher lateral dynamics (depending on country)

Active Emergency Stop Assist

Active Emergency Stop Assist brakes the vehicle to a standstill in its own lane if it recognises that the driver is no longer responding to the traffic situation for a longer period. This works in the new SL even if Active Distance Assist DISTRONIC with Steering Assist is not switched on. Further innovation: Belt tensioning and braking jerk as a final signal of impending braking action

Active Brake Assist with cross-traffic function

Active Brake Assist uses the on-board sensors to register whether there is a risk of collision with vehicles travelling ahead, crossing or oncoming. The system can give the driver a visual and audible warning if a collision appears imminent. If the driver's braking response is too weak, the system can also assist by increasing the brake pressure as the situation demands, and also initiate autonomous emergency braking if the driver fails to respond. New features:

- The turning function (including crossing pedestrians when making a turn),
- Extension of the cross-traffic function to interurban routes (up to 120 km/h instead of 72 km/h)
- Warning and braking if there is oncoming traffic

Active Blind Spot Assist and exit warning function

Active Blind Spot Assist can give a visual warning - and if the indicators are operated also an audible warning - of potential lateral collisions in a speed range from around 10 to 200 km/h. If the driver ignores the warnings and still tries to change lane, the system can take corrective action by one-sided braking intervention at the last moment if the speed exceeds 30 km/h. When the vehicle is stationary, the exit warning function can warn against exiting because a vehicle (or even a bicycle) is passing within the critical area. This function is available when the vehicle is stationary and up to three minutes after the ignition is switched off. New features:

- Reinforcement of the warning by the active ambient lighting (including the exit warning)
- Thanks to the cameras of MBUX Interior Assist, a danger warning can already be given if the driver or front passenger merely move a hand towards the door handle.

DIGITAL LIGHT with projection of warning symbols onto the road surface

The revolutionary DIGITAL LIGHT headlamp technology is on board as standard in the SL models. It enables innovative functions, such as the projection of guidelines or warning symbols onto the road. DIGITAL LIGHT has a light module in each headlamp with three powerful LEDs whose light is refracted and directed with the help of 1.3 million micro-mirrors. The resolution is therefore more than 2.6 million pixels per vehicle. The micro-mirrors occupy the same area as a thumbnail. A control unit with a powerful graphic processor uses an HDMI-like connection to generate a continuous video stream to the mirrors. DIGITAL LIGHT therefore uses the technology of video projectors. The new headlamp can be recognised by its concave lens.

Highbeam Assist is highly accurate in masking out oncoming traffic or traffic signs. The light-dark boundaries and the light distribution of all other adaptive light functions are also realised with significantly improved precision, which optimises illumination in fog light, motorway light or city light, for example.

The assistance functions are revolutionary:

- Warning of recognised roadworks by projecting an excavator symbol onto the road surface

- Aiming a spotlight at pedestrians detected at the roadside as a warning
- Traffic lights, stop signs or no-entry signs are pointed out by projecting a warning symbol onto the road surface
- Assistance on narrow road lanes (roadworks) by projecting guidelines onto the road surface
- Indication of the start of the cooperative lane change
- Warning and directional guidance when Lane Keeping Assist or Blind Spot Assist detect a hazard

Preventive occupant protection PRE-SAFE®

The Mercedes-AMG SL offers the unique PRE-SAFE® preventive occupant protection already as standard. In dangerous situations, PRE-SAFE® tightens the driver's and front passenger's seat belts as a precaution, for example, or moves the front passenger seat to a more favourable position in a possible collision. PRE-SAFE® uses the sensor technology of other systems such as ESP® or the driver assistance systems for this purpose.

The safety of little ones has also been taken into account: Child seat attachments according to the i-Size standard with Isofix anchorages and TopTether are located on the rear seats and on the front passenger seat. To ensure that the front passenger airbag is deactivated for safety reasons when small passengers act as co-pilots, an automatic child seat recognition system is installed on the front passenger seat: A mat integrated into the seat surface detects whether a child seat is fitted based on the weight distribution. Special child seats with transponders are therefore not required.

Many digital services from Mercedes me connect

The new Mercedes-AMG SL: the connectivity

The MBUX (Mercedes-Benz User Experience) infotainment system provides extensive intuitive operating options and many digital services from Mercedes me connect. Its strengths include the intuitive operating concept via touchscreen or touch control buttons on the steering wheel, smartphone integration of Apple CarPlay and Android Auto, hands-free system via Bluetooth connection and digital radio (DAB and DAB+).

In conjunction with MBUX, customers already have access to connectivity services such as Live Traffic Information. With Mercedes me connect, however, the new SL becomes even more intelligent overall: Additional functions can be used before and after the journey or while on the road. All that is required is to link the roadster to a Mercedes me account in the Mercedes me Portal and accept the Terms of Use.

The Mercedes me connect offering is extensive and ranges from maintenance management and remote controls to car park information. For example, the SL recognises when maintenance is required and automatically sends a message to the Mercedes-AMG service partner stored by the customer. The latter can prepare a quotation for the upcoming maintenance work and send it to the customer on request. With the remote vehicle status query, the customer can check important data of their vehicle such as fuel level or tyre pressure at any time from the comfort of their home or office.

With remote door locking and unlocking, the vehicle can be locked and unlocked or checked to see if the vehicle is locked via the Mercedes me app. This is also possible from anywhere and at any time. This service includes a password entry when opening the vehicle, which can reduce the risk of third-party access to the vehicle. Furthermore, the customer can be informed by e-mail that their vehicle has been unlocked remotely. Other functions include, for example, vehicle location via GPS and geographic vehicle monitoring (geofencing).

Avoid traffic jams effectively and save time

Thanks to navigation with Live Traffic Information and Car-to-X communication, the customer drives with real-time traffic data. This way, traffic jams can be avoided efficiently and valuable time can be saved. Thanks to Car-to-X communication, connected vehicles exchange information about traffic events. Early information about danger spots - when the hazard warning lights are switched on, for example - increases safety. Regular online updates of the navigation map ensure that it is always up-to-date.

Available parking spaces on public roads are shown with availability forecasts, and in some instances in real time. They can be seen in the Mercedes me App and optionally in the MBUX navigation map, as can parking spaces in multi-storey car parks. The data can be transferred to the navigation system. Depending on the provider, additional information such as opening hours, the number of parking spaces and their height as well as prices and payment methods are displayed. The current weather and temperature in the vicinity are optionally displayed on the navigation map.

Destinations can also be entered as 3-word addresses based on the what3words system (w3w). what3words is the simplest way of specifying a location. The world is divided into three-by-three metre squares here. Each square has a unique, distinctive address consisting of three words. This gives an address to any location on earth - even where there are no postal addresses. This can be of great help when searching for destinations.

With the "Hey Mercedes" voice assistant, MBUX functions can be used and online question can also be asked, for example, about the weather or restaurants. No predefined phrases have to be used. The system understands simple colloquial language. Examples: "Where can I get a burger nearby"? and "Do I need an umbrella today"? The results of the online search for restaurants or hotels, for example, can be used as a destination in the navigation. In conjunction with the "Internet in the Car" service, a Wifi hotspot can be set up or other services such as Internet radio and music streaming can be used.

Technical data¹

Mercedes-AMG SL 63 4MATIC+

Engine		
Number of cylinders/arrangement		8/V
Displacement	cc	3982
Rated output	kW/hp	430/585
at engine speed	rpm	5500-6500
Rated torque	Nm	800
at engine speed	rpm	2500-5000
Compression ratio		8.6
Mixture formation		Microprocessor-controlled petrol injection, twin turbocharging
Power transmission		
Drive system layout		Fully variable AMG Performance 4MATIC+ all-wheel drive
Transmission		AMG SPEEDSHIFT MCT 9G (automatic transmission with wet multi-disc start-off clutch)
Gear ratios		
1st/2nd/3rd/4th/5th/6th/7th/8th/9th gear		5.35/3.24/2.25/1.64/1.21/1.00/0.87/0.72/0.60
Reverse		4.80
Suspension		
Front axle		AMG ACTIVE RIDE CONTROL suspension with semi-active anti-roll stabilisation, aluminium double wishbones, anti-dive control, coil springs and adaptive adjustable damping
Rear axle		AMG ACTIVE RIDE CONTROL suspension with semi-active anti-roll stabilisation, aluminium double wishbones, anti-dive control, coil springs and adaptive adjustable damping
Brake system		Hydraulic dual-circuit brake system; front 390 mm composite brake discs, vented and perforated, 6-piston aluminium fixed calliper; rear 360 mm composite brake discs, vented and perforated, 1-piston aluminium floating calliper; electric parking brake, ABS, Brake Assist, 3-stage ESP®
Steering		Electromechanical speed-sensitive power steering with rack and pinion, variable steering ratio (14.4:1 at dead centre) and variable power assistance
Wheels		front: 9.5 J x 20 H2; rear: 11 J x 20 H2
Tyres		front: 265/40 ZR 20; rear: 295/35 ZR 20
Dimensions and weights		
Wheelbase	mm	2700
Front/rear track	mm	1660/1625
Length/height/width	mm	4705/1353/1915
Turning circle	m	12.84
Boot capacity	l	213-240
Kerb weight acc. to EC	kg	1970
Payload	kg	320
Tank capacity/of which reserve	l	70/10
Performance, consumption, emissions		
Acceleration 0-100 km/h	sec.	3.6
Maximum speed	km/h	315
Combined fuel consumption, WLTP	l/100 km	12.7-11.8
Combined CO ₂ emissions, WLTP	g/km	288-268

¹ Technical data on power, torque, mileage, fuel consumption and emissions in this publication are provisional and have been determined internally in accordance with the applicable certification method. Confirmed TÜV figures, EC type approval and certificate of conformity with official figures are not yet available. Differences between the stated figures and the official figures are possible.

Technical data¹

Mercedes-AMG SL 55 4MATIC+

Engine		
Number of cylinders/arrangement		8/V
Displacement	cc	3982
Rated output	kW/hp	350/476
at engine speed	rpm	5500-6500
Rated torque	Nm	700
at engine speed	rpm	2250-4500
Compression ratio		8.6
Mixture formation		Microprocessor-controlled petrol injection, twin turbocharging
Power transmission		
Drive system layout		Fully variable AMG Performance 4MATIC+ all-wheel drive
Transmission		AMG SPEEDSHIFT MCT 9G (automatic transmission with wet multi-disc start-off clutch)
Gear ratios		
1st/2nd/3rd/4th/5th/6th/7th/8th/9th gear		5.35/3.24/2.25/1.64/1.21/1.00/0.87/0.72/0.60
Reverse		4.80
Suspension		
Front axle	AMG RIDE CONTROL suspension with aluminium double wishbones, anti-squat and anti-dive control, lightweight coil springs, stabiliser and adaptive adjustable damping	
Rear axle	AMG RIDE CONTROL suspension with aluminium double wishbones, anti-squat and anti-dive control, lightweight coil springs, stabiliser and adaptive adjustable damping	
Brake system	Hydraulic dual-circuit brake system; front 390 mm composite brake discs, vented and perforated, 6-piston aluminium fixed calliper; rear 360 mm composite brake discs, vented and perforated, 1-piston aluminium floating calliper; electric parking brake, ABS, Brake Assist, 3-stage ESP®	
Steering	Electromechanical speed-sensitive power steering with rack and pinion, variable steering ratio (14.4:1 at dead centre) and variable power assistance	
Wheels	front: 9.5 J x 19; rear: 11 J x 19	
Tyres	front: 255/45 ZR 19; rear: 285/40 ZR 19	
Dimensions and weights		
Wheelbase	mm	2700
Front/rear track	mm	1665/1629
Length/height/width	mm	4705/1359/1915
Turning circle	m	12.84
Boot capacity	l	213-240
Kerb weight acc. to EC	kg	1950
Payload	kg	330
Tank capacity/of which reserve	l	70/10
Performance, consumption, emissions		
Acceleration 0-100 km/h	sec.	3.9
Maximum speed	km/h	295
Combined fuel consumption, WLTP	l/100 km	12.7-11.8
Combined CO ₂ emissions, WLTP	g/km	288-268

¹ Technical data on power, torque, mileage, fuel consumption and emissions in this publication are provisional and have been determined internally in accordance with the applicable certification method. Confirmed TÜV figures, EC type approval and certificate of conformity with official figures are not yet available. Differences between the stated figures and the official figures are possible.

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Mercedes-Benz AG at a glance

Mercedes-Benz AG is responsible for the global business of Mercedes-Benz Cars and Mercedes-Benz Vans with over 170,000 employees worldwide. Ola Källenius is Chairman of the Board of Management of Mercedes-Benz AG. The company focuses on the development, production and sales of passenger cars, vans and vehicle-related services. Furthermore, the company aspires to be the leader in the fields of electric mobility and vehicle software. The product portfolio includes the Mercedes-Benz brand with the Mercedes-AMG, Mercedes-Maybach, Mercedes-EQ, G-Class brands as well as the smart brand. The Mercedes me brand offers access to the digital services from Mercedes-Benz. Mercedes-Benz AG is one of the world's largest manufacturers of luxury passenger cars. In 2020, it sold around 2.1 million passenger cars and nearly 375,000 vans. In these two business areas, Mercedes-Benz AG is continuously developing the global production network with around 35 production locations on 4 continents and is gearing itself to the requirements of electromobility. At the same time, the company is constructing and extending its global battery production network on three continents. Sustainability is the guiding principle of the Mercedes-Benz strategy and for the company this means creating lasting value for all stakeholders: for customers, employees, investors, business partners and society as a whole. The basis for this is Daimler's sustainable business strategy. The company thus takes responsibility for the economic, ecological and social effects of its business activities and looks at the entire value chain.