

THE ART OF DRIVING CULTURE

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ALFA ROMEO
GIULIA GTA
THE RETURN OF AN LEGEND



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Founder & Publisher: Markus Elsaesser
Editor in Chief: Markus Elsaesser (V.I.S.D.P.)
Deputy Editor: Pamina Fabienne Elsaesser
CEO & CO-Founder: Sabine Elsaesser

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Phone.: +49 (0)7231 - 6035228
E-Mail: office@hubraummagazine.com

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Edeltraud Richter +49 (0)7231 - 7760106
advertisement@hubraummagazine.com

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BACALAR SPEARHEADS BE RETURN TO THE PINNACLE



HIGH PERFORMANCE

BENTLEY MULLINER'S OF COACHBUILDING







Bentley Mulliner has revealed the all-new Bacalar at the home of Bentley in Crewe, England this morning. The rarest two-door Bentley of the modern era, and the ultimate expression of two-seat, open-air luxury, this definitive Grand Tourer spearheads a return to coachbuilding by Bentley Mulliner – the oldest coachbuilder in the world.

Just 12 examples of this striking, limited edition model are being created, guaranteeing rarity and exclusivity, and offering supreme luxury and breath-taking performance. Bacalar looks to the future of bespoke luxury motoring - each model will be handcrafted in Bentley Mulliner's workshop in Crewe, according to the individual customer's personal tastes.

This exceptionally rare car is appropriately named after Laguna Bacalar in Mexico's Yucatan peninsula, a lake renowned for its breath-taking natural beauty, continuing Bentley's strategy of naming cars after remarkable landmarks which started with Bentayga in 2015.

Bacalar has been brought to life by Bentley Mulliner, reviving its specialism in providing rare coach-built cars to only a few discerning customers. A roofless Barchetta design with all-new and highly muscular coachwork, embracing a myriad of options and materials, each Bacalar will be truly unique, the result of direct interaction between the Bentley Mulliner design team and the individual customer.

The most exclusive two-door Bentley of the modern era launches a new Bentley Mulliner operation, and forms part of a new strategy for the world's oldest coachbuilder that will see the division offer three different portfolios: Classic, Collections and Coachbuilt.

Bentley Mulliner has an illustrious history and can proudly trace its roots back to the 1500s when the company's original focus was customising luxurious, horse-drawn carriages. The remarkable Bacalar is therefore the culmination of almost 500 years of expertise and heritage in the art of vehicle design.

Adrian Hallmark, Chairman and Chief Executive of Bentley Motors, comments:

"The Bentley Mulliner Bacalar is our ultimate expression of an open-top, luxury grand tourer, and of the immense capabilities of our team in Crewe.

"In Bacalar, we have created a fully bespoke Bentley, orientated towards a two seat open top experience, and carrying a number of the forward thinking elements of future luxury, first heralded in our EXP100GT as part of our Centenary celebrations last year.

"Bacalar is a rare and remarkable Bentley, and whilst clearly defined, will be an extraordinary and collaborative experience for just twelve discerning people who will now co-create, collect, drive and treasure one of twelve being built.

“Our customers are as excited as we are about Bacalar, as it brings our team and discerning enthusiasts together, to create the finest bespoke, hand-built cars, and push the boundaries of our imagination and capabilities.”

A masterpiece of craftsmanship, the Bacalar is a seamless fusion of materials with an intelligent curation of technology. It draws on design DNA from the beautifully sculpted, award-winning EXP 100 GT which was recently crowned ‘Most Beautiful Concept Car of the Year’ at the prestigious French Festival Automobile International and ‘Concept Car of the Year’ by GQ magazine.

A statement of purpose for the future, Bacalar now propels Bentley into a new century of extraordinary, as the design team has envisaged the most dynamically sculpted model to date. The dramatic, tapered cowls at the rear hark back to the Barchetta sports cars of old, whilst underlining the promise of a dynamic, driver-focussed adventure in a cossetting, cocooned environment. Pure in line and execution, the distinctive, wraparound

cockpit flows from a new, steeply angled centre console seamlessly into the dashboard and doors. These then wrap rearwards towards the semi-enclosed luggage compartment behind the two seats.

Sustainable, ethically-sourced materials previewed in the EXP 100 GT concept car last year have now become reality in the Bacalar – just eight months after first being previewed. These include paint containing ash from rice husks, which provides a sustainable way of delivering a rich metallic finish, natural British wool and 5,000-year-old Riverwood sourced from the ancient Fenlands of East Anglia.

The Bacalar features an enhanced version of Bentley’s peerless 6.0-litre, W12 TSI engine. The most advanced 12-cylinder engine in the world, it produces 659 PS (650 bhp) and 900 Nm (667 lb.ft) of torque.

An advanced Active All-Wheel-Drive System varies the torque split between front and rear wheels. It allows the Bacalar to use rear-wheel drive as much as possible

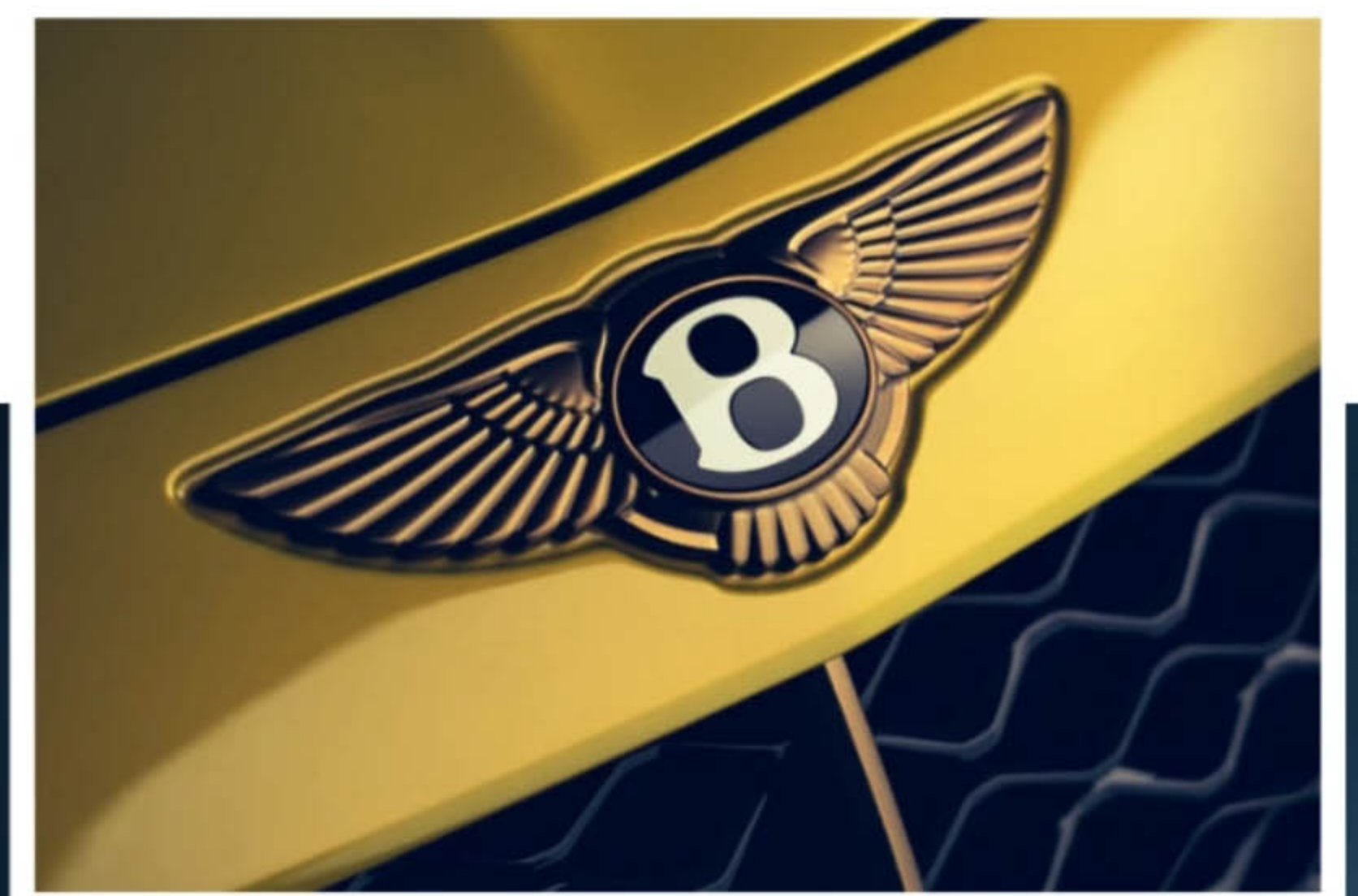
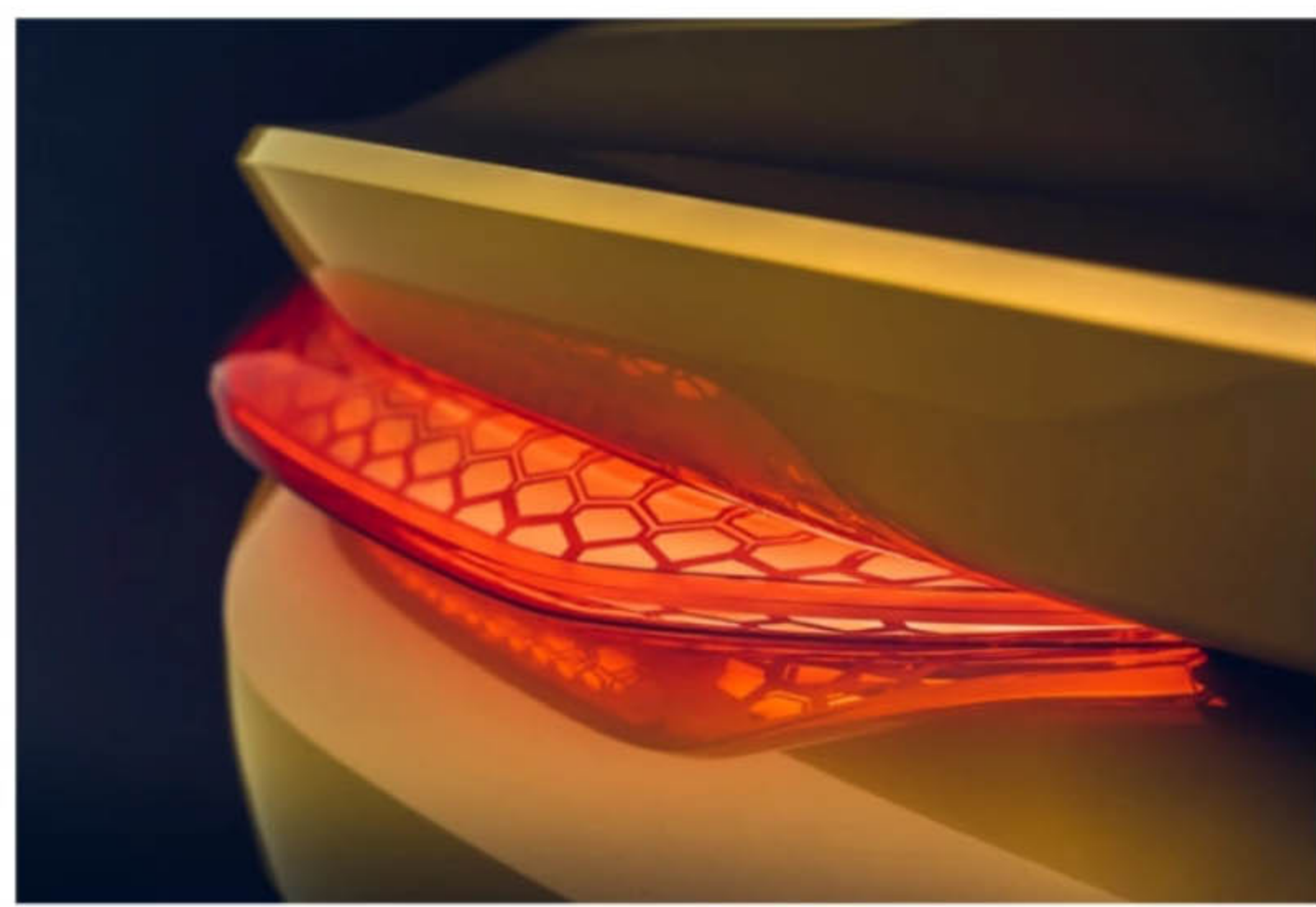
during normal driving for optimum efficiency and dynamic performance. The drivetrain is at the heart of the Bacalar, creating the ultimate open-air, two-seat luxury Grand Tourer available in the world today.

All examples of the exquisite Bentley Mulliner Bacalar have already been allocated to customers from around the world.

Bentley Mulliner Returns To Coachbuilding

With the Bacalar, customers will again have the ability to work closely with a team of specialist designers to enhance their vehicle with a selection of unique materials and specially curated options. The Bacalar will be the first – but other new bespoke Bentleys will follow as part of the Bentley Mulliner Coachbuilt portfolio – one of three new divisions of the Bentley Mulliner organisation.

The Bentley Mulliner Classic offering was introduced last year with the announcement that Bentley’s 1929 Team





Blower is to be reborn with a new build of 12 supercharged 4½-litre examples of the iconic car. These models, each individually handcrafted by a team of specialists from Bentley Mulliner, will form the world's first pre-war race car continuation series. This subdivision of Mulliner also completed an immaculate restoration of the 1939 Bentley Corniche last year.

The third arm of the business – Bentley Mulliner Collections – will continue to offer customers luxury-focused derivatives of the core Bentley range, such as the new Continental GT Mulliner Convertible, as well as the opportunity to personalise their new Bentley. An expansive number of options is available across the full line-up of current production cars – from unique colour-matched paint, hide and thread combinations, to bespoke feature content.

Tracy Crump, Bentley Mulliner's Head of Commercial Operations, comments:

"While Bentley's motto is 'Be Extraordinary', at Bentley Mulliner we look to take it one step further, 'Beyond Extraordinary'. With the new Bacalar we have been able to do exactly that, providing a select number of customers with the opportunity to express their personal taste in a truly remarkable grand tourer. Meanwhile, Bentley Mulliner Classic will breathe new life into the most iconic cars from our past, while our Collections team continue their work to offer a bespoke service to each and every Bentley customer."

Bacalar – A Dynamically-Sculpted Design For The Future

The new Bentley Mulliner Bacalar is a genuine 'roofless' Barchetta – a luxury, two-seat, open-air performance car, the likes of which has never been seen before. Handcrafted to the individual customer's personal tastes, Bacalar is the ultimate expression of an open-top Grand Tourer: a spirited GT combining traditional handcrafted techniques with the latest cutting-edge technology.

The Bacalar shares no body panel with any other car in the Bentley model line-

up and derives inspiration from the dramatic EXP 100 GT concept car conceived to mark the company's centenary last year. Indeed, it only shares one exterior component with a Continental GT – the door handle, simply because it contains the keyless entry system.

Stefan Sielaff, Bentley's Director of Design, comments:

"You can clearly see echoes of the EXP 100 GT in the Bacalar, as well as the influence of the past. Bentley has a rich history of open-cockpit cars – the design of the Birkin Blower Bentley of the late 1920s was also an inspiration. We needed to push the boundaries as far as possible – customers were asking what Bentley's take on a more expressive-looking car at this price point would look like. We were also tasked with starting to deliver on Bentley's promise to use sustainable materials. Within less than a year of revealing our future-focused concept, we have already delivered on this promise."

The rear clamshell and top deck of the Bacalar are crafted from lightweight aluminium, while the doors and wings are carbon fibre. Combined with the use of three-dimensional printing, it has allowed designers to create an even more distinctive car.

The Bacalar sits on extended haunches, with the rear track 20 mm wider than a Continental GT, to provide a more muscular, sporting stance. They house bespoke, 22-inch tri-finish wheels with dramatic depth and contour on the road. The unique front and rear horizontal lights add the distinctive, dynamic character that was first seen on the EXP 100 GT.

Instead of a traditional badge, Bentley designers went the extra mile to find a special way to identify the car. Uniquely, the Bacalar name appears on the rear panel, 'hidden' behind the lacquer of sustainable rice husk paint, with the capital 'A's influencing the contours of the lower bumper area.

The exterior look of each model will be completed in collaboration with individual customers, who are able to further



personalise their car, choosing from rare paint options, exterior treatments and design themes. The Bacalar represents a return to the exciting early years of Bentley, allowing owners to help shape the car of their dreams.

A Unique Wraparound Cockpit

Inside the luxurious cabin, Bentley craftspersons have created a cockpit like no other. The architecture of the Bacalar has allowed Bentley Mulliner designers to seize the opportunity to create a theme that not only blends the interior and exterior together but also emphasises the two-seater character with a 'wrap-around' cockpit design.



Pure in line and surface execution, the wraparound design flows from a steeply angled centre console into the dashboard, before sweeping into the door panels. These then wrap towards a uniquely styled, semi-enclosed luggage compartment behind the seats.

This ingenious space is purposely designed for bespoke Schedoni fitted luggage, the Italian company that has designed luxury luggage for the automotive industry for almost 140 years. Created exclusively for the Bacalar, the optional luggage perfectly matches the trim and materials of the cabin. These two luggage 'pods' flow from the interior into the exterior, enveloping the seats and creating a true

two-seater cabin.

Uniquely designed details and features in the cabin emphasise the coach-built character of the car, with an almost infinite number of ways for customers to express their personal taste and commission a unique interior.

Every detail has been uniquely designed. A new, knurled pattern was created for the iconic 'bullseye' vents – a pattern that was repeated around the interior on areas like the steering wheel controls, media and climate controls and even the intricate speaker frets. Each element has a fine, Dark Bronze detail to further enhance the finish, with Midnight Black

Titanium detailing.

The dark, anodised titanium finish on the main controls and a metallic dark bronze on the iconic Bulls-eye air vents have been used to highlight further details.

The interior can be finished in any number of ways, with each car co-created and commissioned in conjunction with the Bentley Mulliner team. Every car will be individually specified and finished using any of the many Bentley colours and materials available.

The finest Beluga leather is carefully sewn together with Bentley's heritage



semi-gloss leather and natural wool to create a dark 'tone-on-tone' character. For the first demonstration car, the use of Bentley Mulliner's Khamun accent leather highlights the wraparound cabin theme and matches the new and unique Yellow Flame exterior paintwork perfectly.

Every element that falls to hand has been specifically designed for the Bacalar. A new D-shaped steering wheel features Alcantara inserts, with a contrast accent top marker. The gear-shifter is also finished in Alcantara with Dark Bronze detailing. Unique leather strap door and seat releases, unique digital instrumentation and a unique key design enhance the luxurious cabin still further.

At the heart of the centre console is the now famous Bentley Rotating Display. This digital MMI display has been elegantly designed by Bentley with a customer-configurable home screen. The system involves 40 moving parts and revolves the Riverwood veneer when the engine is started to reveal the high-resolution touchscreen.

Three configurable windows are able to display the driver's preferred functions, such as telephone, media and navigation. The interface is designed to operate like a modern smartphone, with menus that are structured and simple to follow. The third side of the Bentley Rotating Display presents three, elegant analogue dials that display outside temperature, a compass and chronometer – providing an alternative to the touchscreen when the driver wants to digitally detox.

Each car also features a unique clock face with individual one-of-12 badging.

Owning a Bacalar is the start of a journey of discovery for the owner. Every element has been carefully and meticulously designed with a depth so great that over the course of time, each customer will discover new and interesting details.

From the use of precious inlays and unique finishes to the driver controls, to the 148,199 individual stitches needed to embroider the unique Bacalar quilt on each seat, owners will find details and

parts not seen before on a Bentley.
Sustainable Craftsmanship And Ethically-Sourced Materials

Bentley has entered into collaborative relationships with carefully selected industry experts to create the new Bacalar. Each one uses sustainable and innovative techniques that exemplify the best craftsmanship that the world has to offer, in many cases fine-tuned over centuries, and using ethically-sourced materials.

A focal point of the cabin is the wraparound dashboard cut from rare Riverwood, a sustainable wood from naturally fallen trees that has been preserved for 5,000 years in peat bogs, lakes and rivers found in the Fenlands of East Anglia, England.

This exquisite wood was chosen for its striking black aesthetic, the result of lying untouched in wet earth for thousands of years. The wood has been air-dried in a controlled environment over a long period of time to prevent damage and conserve its unique, natural characteristics. The straight grain enhances the



Bacalar's sweeping interior contours, giving it genuine soul and drama.

Once veneered, the dashboard is literally sliced in two, creating an upper and lower element divided by a 3mm chrome strip. The upper Riverwood is finished as open pore – a semi-matt finish that shows off the veneer's grain and colour.

The lower panels are a high gloss finish but with a modern twist to the traditional process. The Bacalar's lower dashboard blends seamlessly from veneer into a high gloss piano black, further underlining the unique and bespoke finishes that are available. Because the Bacalar has no roof, this stunning marquetry is clearly visible from outside the car.

Bentley Mulliner has also collaborated with a traditional British textile mill to produce bespoke natural wool cloth akin to a fine tailor's suit. Bentley Mulliner has embraced the expertise and knowledge of these centuries-old methods to create an exclusive and unique woven cloth especially for the Bacalar, and customers will have the option to co-create their own bespoke fabric blend.

This traditionally-produced textile is used in the seat inserts, seat backs and the side of the head restraints. Following the interior styling lines, it also flows from the side of the centre console and lower instrument panel into the doors.

Further promoting sustainable craftsmanship and supporting a unique industry, the luxury overmats are precision woven on traditional Wilton looms in England using the finest natural yarns. These Wilton-woven pure wool deep pile

carpets are hand-carved for the footwell and rear luggage compartment, following the embroidered pattern found on the seats.

Thanks to a partnership with another local supplier, based in the nearby Peak District, the Bacalar also offers customers the rare opportunity to create individual artisan piping, chosen to enhance the dynamic styling lines of the seat architecture. This piping can be designed and customised to feature unique pat-





terns, colour combinations and personal embossed effects, such as a customer's signature or special, individual customer motifs. Even the paintwork on the Bacalar has been specially chosen for its sustainable characteristics. The pigment reflects an eye-catching transition of colour that intensifies the drama, form and contours of the sculpted exterior in different lights. The pigment is synthetically-manufactured silicon dioxide platelet coated with iron oxide. This synthetic process uses rice husk ash – a by-product from the rice industry – to create 90 per cent pure silicon dioxide, thereby reducing rice husk landfill waste.

Each Bacalar will be hand-crafted in Mulliner's dedicated workshop at the Bentley factory in Crewe – the world's first certified carbon neutral factory for luxury car production.

A Unique Driving Experience

The Bentley Bacalar combines bespoke, hand-crafted luxury with state-of-the-art technology to guarantee an extraordinary driving experience. With all-new coachwork brought to life by Bentley Mulliner, at the heart of the Bacalar is

Bentley's renowned 6.0-litre, twin-turbocharged W12 TSI engine mated to a technically-advanced drivetrain.

The Bacalar's dual-clutch, eight-speed transmission offers faster, more efficient gear changes. An adaptive chassis uses Bentley's intelligent, 48-volt Dynamic Ride System to ensure a responsive ride and exceptional handling and refinement in all conditions. The air suspension system controls ride comfort and lateral roll, cushioning passengers from excessive movement, as well as making the Bacalar feel effortlessly precise.

The Legend Of Mulliner

The legend of Mulliner is woven into the very fabric of Bentley. The tradition of bespoke craftsmanship has been passed down from generation to generation since the 1500s, when Mulliner was founded as a saddler.

In the 1760s, the Mulliner family business refocused on coachbuilding and rose to prominence when it was commissioned to build and maintain carriages for the Royal Mail postal service. With the arrival of the motor car, the company step-

ped away from horse-drawn carriages and focussed on coachbuilding for mechanical propulsion. The then independent Mulliner crafted a bespoke, 3-litre, two-seater Bentley for the 1923 Olympia Show in London, creating a bond between the two companies that would last for decades. Mulliner bodied over 240 Bentley chassis in the 1920s alone and became renowned as the very best of the new coachbuilding firms.

Perhaps the most famous was Mulliner's design for the 1952 R-Type Continental, still considered one of the most beautiful cars of all time. The fastest, four-seat sports car of the era, the R-Type's iconic beauty continues to influence design today through the Bentley Continental GT.

Mulliner cemented its partnership with Bentley in 1959 by becoming part of the business. It later moved into the old engineering experimental department at Bentley headquarters in Crewe and has remained there ever since. Today, around 40 employees, ranging from specialists with over 40 years of Mulliner experience to apprentices learning the skills that have been honed over decades of manufacturing, work for the company. ■





ALFA ROMEO GI THE RETURN OF

HIGH PERFORMANCE



GIULIA GTA CAN BE AN LEGEND



Alfa Romeo boasts a unique history and, on 24 June, it will have been in business for 110 years, during which its engineers and designers have relentlessly pursued innovation. Over the years, this combination has created some of the most iconic vehicles ever built, and to mark its 110th birthday, Alfa Romeo will pay tribute to one of its most emblematic vehicles: Giulia GTA.

Available in two versions, the Giulia GTA with four seats and the Giulia GTAm with two race seats, roll-bar and six-point harness, they will both feature the 2.9-litre V6 Bi-Turbo petrol engine producing 540hp along with a raft of weight saving solutions to remain true to the ethos of the original 1965 model.

Specific technical features and functional style

On the Giulia GTA, the Alfa Romeo engineers have worked to improve the aerodynamics and handling but above all to reduce the weight. The active aerodynamics were specifically studied to increase the downforce. These solutions contain technical know-how that comes directly from Formula 1, thanks to the synergy with Sauber Engineering and the use of the Sauber Aerokit. The same task is assigned to the side skirts, the specific rear spoiler and the active front splitter.

The titanium Akrapovič central exhaust system, integrated in the carbon fibre rear diffuser, is also new, as are the 20-inch centre lock wheels. Handling at high speeds has been improved by widening the front and rear wheel tracks by 50mm and developing a new set of springs, shock absorbers and bushings for the suspension systems.

On the GTAm, the aerodynamic front has been optimised by adding a larger front splitter and a real carbon-fibre rear wing, which ensure a perfectly balanced load at high speeds. In terms of performance, the Alfa Romeo 2.9-litre V6 Bi-Turbo engine, made entirely of aluminium and capable of unleashing no less than 510hp in the standard configuration, reaches an output of 540hp in the Giulia GTA thanks to the meticulous development and calibration work of the Alfa Romeo engineers. A new Akrapovič central exhaust system, in titanium and gives the car an unmistakable sound.

An Alcantara® trimmed dashboard, door panels, glove compartment, side pillars and the central trim on the seats, characterise the interior. Alcantara® is used even more extensively in the GTAm version, where the rear bench has been removed, leaving room for a fully upholstered 'basin', with specific mouldings designed to hold helmets and a





fire extinguisher. The new matt carbon-fibre inserts give the interior a distinctive technical and aesthetic elegance. In the new GTAm, the interior is unique in that it features a roll-bar, no door panels or rear seats and the door is opened with a belt in place of the handle, another touch inspired by the racing world.

An excellent power-to-weight ratio

Power on its own is not enough to ensure extraordinary performance. The work done to reduce the vehicle weight has been meticulous, with the total weight reduction amounting to 100kg. To achieve this the GTA uses lightweight materials such as carbon fibre for the drive shaft, bonnet, roof, front bumper, front wheel arches and rear wheel arch inserts and the shell of the sports seats with six-point Sabelt seat belts in the GTAm. Aluminium has been used in the engine, doors and suspension systems and various other composite materials have been used throughout.

In the GTAm, Lexan – a unique polycarbonate resin which comes straight from the world of motorsport – has been used in the side and rear window frames, further contributing to the weight reduction. The result is a weight of around 1,520kg which, combined with the increase in output to 540hp, brings the power-to-weight ratio to 2.82 kg/hp, making the Giulia GTAm capable of delivering extraordinary performance. Its acceleration from zero to 62mph, with the Launch Control system, is just 3.6 seconds. The Giulia GTAm is a two-seater configuration that is road legal, with front splitter and larger visible rear wing in carbon.

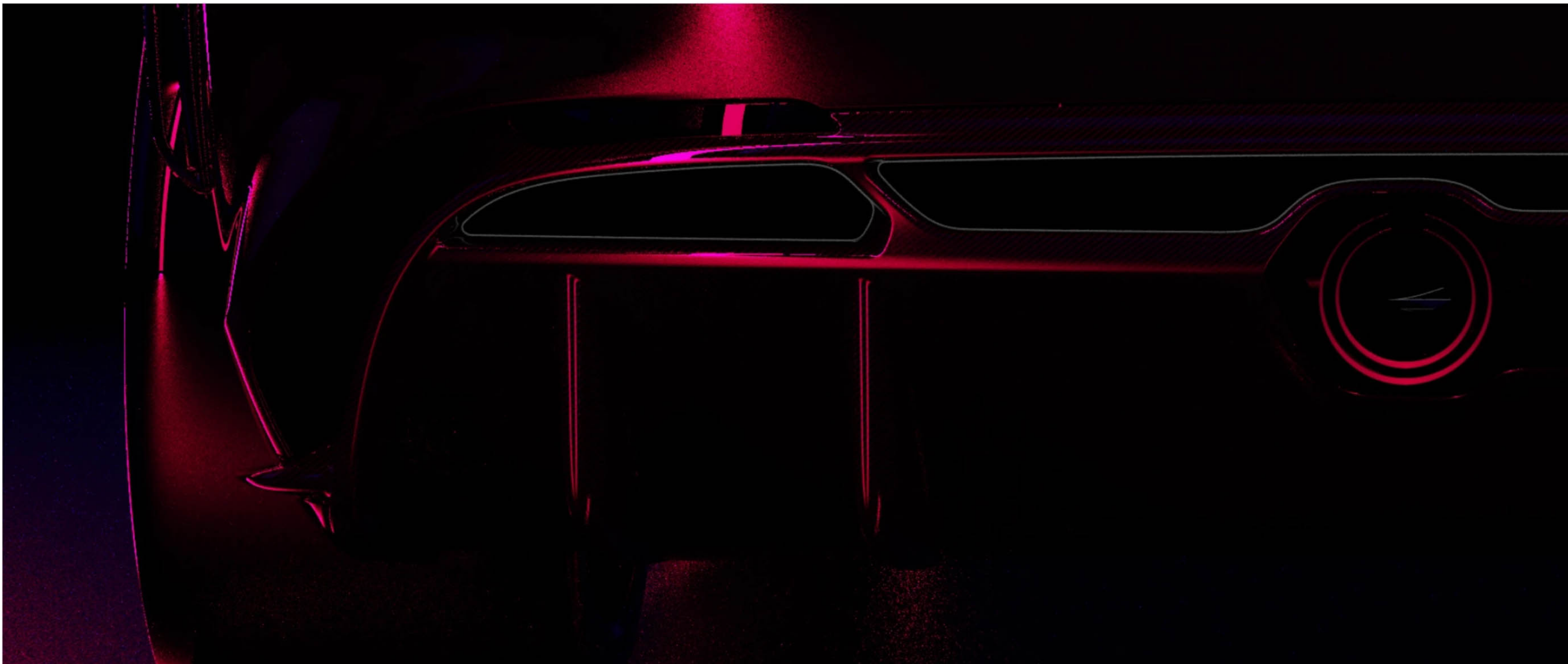
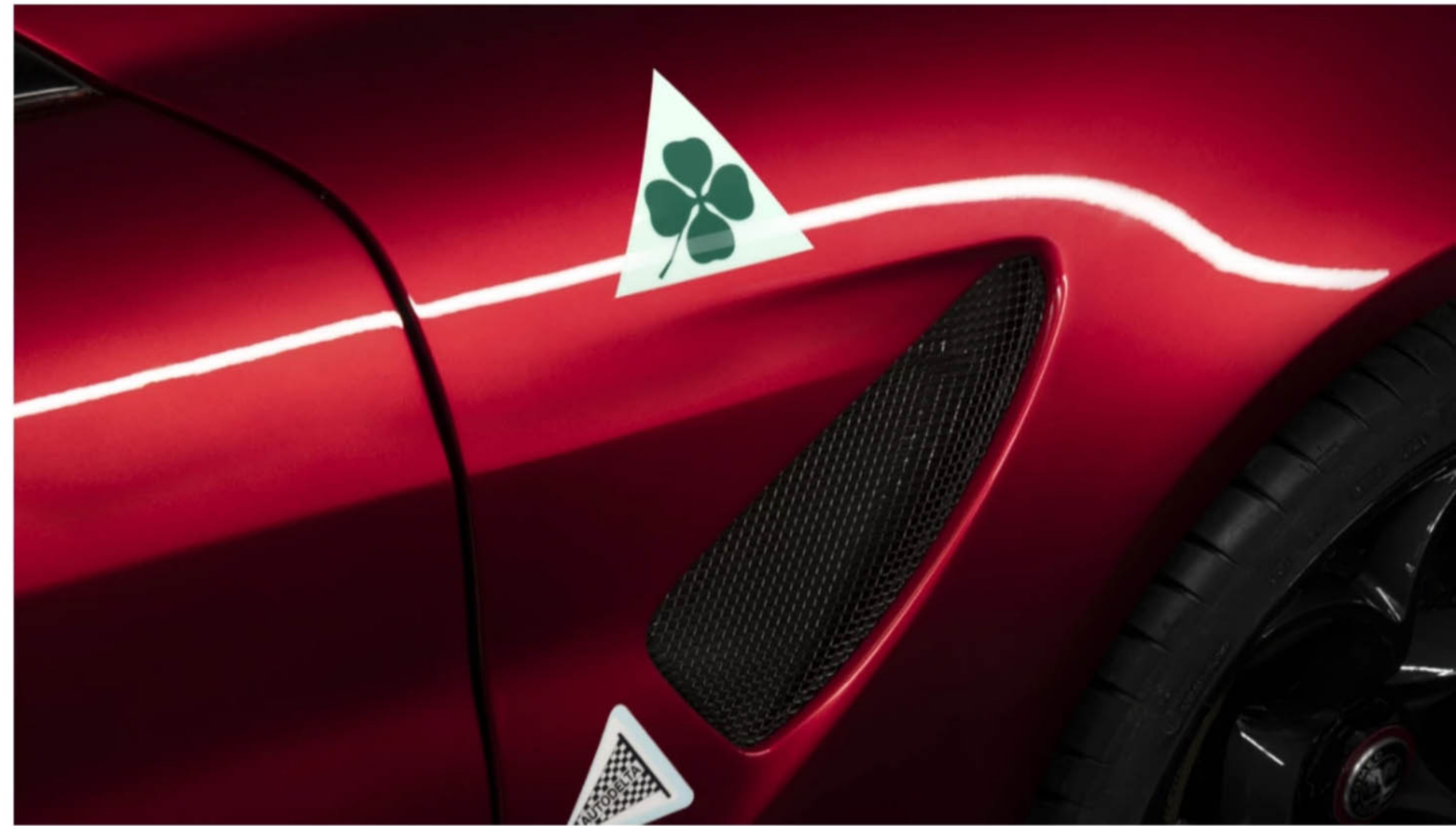
In the GTA trim, with the same output, the Giulia offers four seats, no rear roll-bar, a spoiler and splitter optimised for daily use and the same door panels, seats and windows as those of the Giulia Quadrifoglio. The result is a veritable supercar for everyday use.

A privilege for 500 lucky customers

The Alfa Romeo Giulia GTA and its extreme version, the Giulia GTAm, will be built in a limited edition of only 500 units in total, all numbered and certified and ready to take up their place alongside their 1965 forerunner as one of the most sought-after collector's items. They are not only magnificent to look at, they are also ready to unleash their impressive power on the road, usable thanks to a series of sophisticated

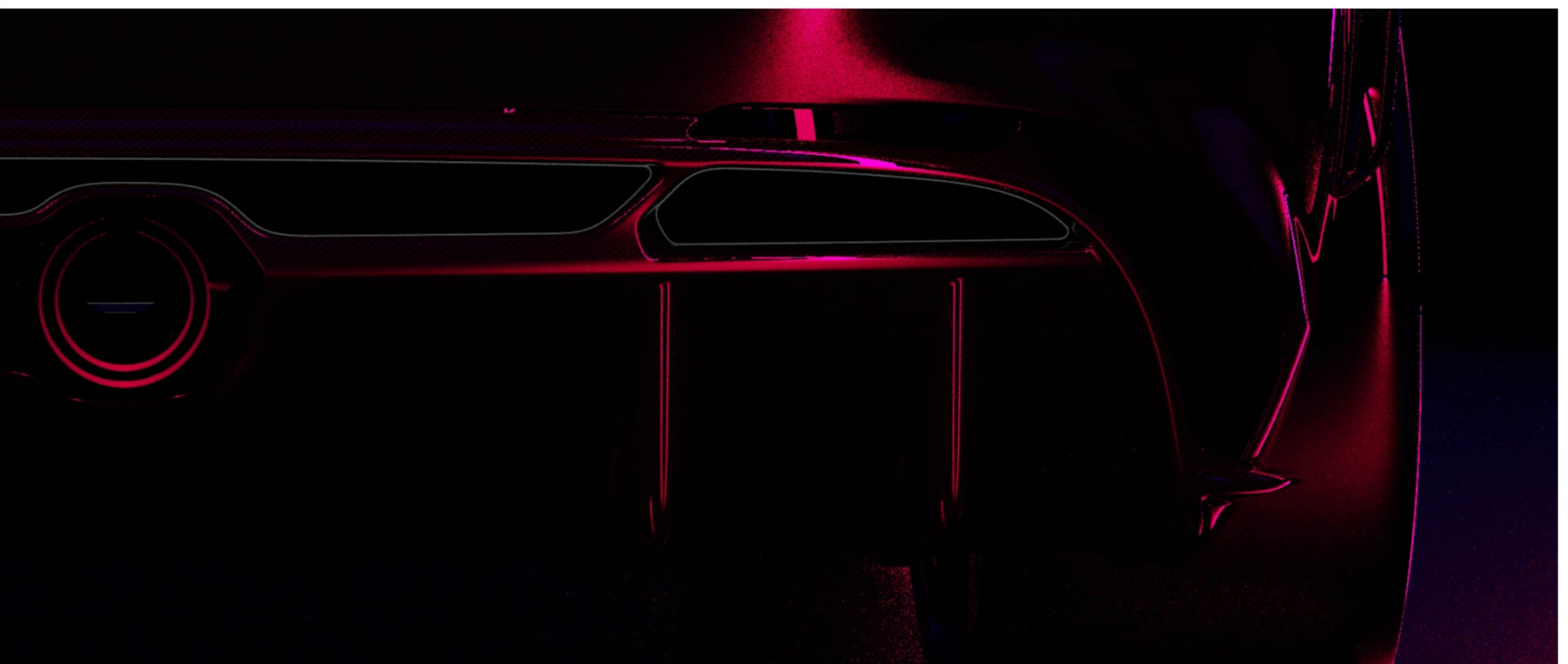








Foto/Quelle: © FCA Group







technical solutions.

An exclusive dedicated customer experience, designed to treat the 500 lucky owners to a unique experience that is 100% Alfa Romeo will come as standard. The owners will receive a personalised experience package, which includes a Bell helmet in special GTA livery, a full racing set by Alpinestars (race suit, gloves and shoes) and a personalised Goodwool car cover for protecting their GTA or GTAm. Customers can also take part in a specific driving course devised by the Alfa Romeo Driving Academy.

A set of initials with a legendary feel: GTA

The acronym GTA stands for 'Gran Turismo Alleggerita' (alleggerita being the Italian term for "lightened"), and it originated in 1965 with the Giulia Sprint GTA, a specific version derived from

the Sprint GT. The body of the Giulia Sprint GT was replaced with an identical version in aluminium, giving a total weight of 745kg compared to the 950kg of the road version.

A second variation concerned the 1,570cm³ twin-cam engine which, in the road configuration, reached an impressive output of 115hp and in the GTA it developed a maximum output of 170hp thanks to the Autodelta technicians from the Alfa Romeo race team. The model's success in competitions was then immediate: three consecutive 'Challenge Europeo Marche', tens of national championships and hundreds of individual races in every part of the world. The Giulia Sprint GTA expressed the claim "A victory a day in your everyday car" to perfection. From then on, the GTA made a name for itself as the undisputed icon of Alfa Romeo sportiness. ■

BUGATTI CHIRO A PURE DRIVING



ON PUR SPORT MACHINE







Foto/Quelle: © BUGATTIAUTOMOBILES S.A.S.

Flat front end, dynamic design and impressive rear spoiler – it's clear from the outset that the new Bugatti Chiron Pur Sport1 yearns for corners and challenging country roads. Pure and unadulterated. A genuine thoroughbred.

Bugatti has been producing sports cars homologated for public roads for over 110 years. In the past, vehicles such as the Type 13 and Type 35 have claimed countless victories at international hill climbs and road races. The Chiron Pur Sport1 is no exception to this long-standing tradition. The new model is an uncompromising hypersports car for exactly those winding roads – a new aerodynamic configuration generates more downforce while the lower weight increases agility. Even travelling at average speeds will stimulate all the senses thanks to a close-ratio transmission, high-performance tyres with a new material mix geared towards extreme grip as well as an agile chassis and suspension setup. By contrast with the Chiron Super Sport 300+1, the record-breaking car that exceeded the threshold of 300 miles per hour for the first time, the Chiron Pur Sport1 focuses on extraordinary, tangible performance throughout the entire range of speeds.

“We spoke to customers and realised they wanted a vehicle that is geared even more towards agility and dynamic cornering. A hypersports car that yearns for country roads with as many bends as possible. An unadulterated, uncompromising driving machine. Consequently, the vehicle is called Chiron Pur Sport1”, explains Stephan Winkelmann, President of Bugatti. “By cutting the weight by 50 kilogrammes while simultaneously boosting the downforce and configuring an uncompromising, sporty chassis as well as suspension setup, the Chiron Pur Sport1 boasts incredible grip, sensational acceleration and extraordinarily accurate handling. It's the most uncompromising yet agile Bugatti of recent times.”

Extraordinary design

The Chiron Pur Sport's concept has been geared towards agility in every sense of the word. The Design Development department's focus was to lend the Pur Sport1 a confident appearance. As a result, the front end is dominated by an intentionally dynamic expression. Very wide air inlets and an enlarged horseshoe panel at the bottom serve as perfect radiator air outlets. The vehicle's striking splitter generates maximum downforce by protruding considerably at the front while also making the vehicle seem wider. Primary lines run across the air outlets on the front wing like tendons on a muscle, radiating the design image of a well-honed athlete.

A new optional split paintwork design has been developed for the Chiron Pur Sport1. The entire bottom third of the vehicle features exposed carbon fibre to make the vehicle seem even lower. From the sides these dark surfaces merge







with the colour of the road surface and make the Pur Sport1 appear even flatter.

The rear of the Pur Sport proudly carries the vehicle's rear spoiler spanning 1.90 metres to generate serious amounts of downforce, and the striking diffuser also significantly boosts the vehicle's aerodynamics. In this process, angled wing mounts form a large X in conjunction with the rear apron, a feature that is inspired by elements of science fiction and motorsport. The design is rounded off by the extremely lightweight and highly temperature-resistant exhaust tailpipe made of 3D-printed titanium. This production method gives the components very thin walls, thus helping to save weight where it really matters.

The vehicle interior is deliberately sporty and raw, and has been reduced to the absolute minimum. Large surfaces have been upholstered with Alcantara to save weight. Dynamic patterns have been lasered into the Alcantara door trim panels featuring contrasting fabric highlights with a metal look. Alcantara guarantees an ideal grip on the steering wheel and improves the side support on seats – even at extreme lateral acceleration levels. All trim and controls are made exclusively of either black, anodised aluminium or titanium. Contrasting

cross-stitching adds colour highlights, as do the steering wheel's 12 o'clock spoke and the blue centre spine.

Sophisticated aerodynamics and exhaust system

A large diffuser and fixed rear spoiler generate plenty of downforce at the back end, while also helping to boost agility. At the same time, doing away with the hydraulic component of the otherwise automatically extending spoiler reduces the weight by ten kilogrammes. Rear wing mounts and diffuser form an aggressive and sporty X-shaped design. "We focussed particularly on the agility of the Chiron Pur Sport1. The vehicle generates more downforce at the rear axle while the large, front splitter, air inlets, wheel-arch vents featuring optimised air outlets and a reduced vehicle height strike a clean balance at the front", Frank Heyl, Head of Exterior Design and Deputy Head Designer at Bugatti, explains.

New wheel design

Frank Heyl and the Technical Development department teamed up to devise a magnesium wheel design featuring optional aero blades for the Pur Sport. Arranged in a ring, the blades guarantee ideal wheel ventilation while also boosting aerodynamics. While the vehicle is in motion the rings fitted to the rim extract air outwards from the wheel where

it is immediately drawn towards the rear. This invention prevents adverse turbulence in the wheel area and also improves the flow across the side of the vehicle. A special cover on each of the five wheel nuts minimises turbulence and adds a final visual touch to the wheel's design. Cutting the weight by a total of 16 kilogrammes results in a lower unladen weight and also reduces the unsprung masses of the already ultra-light Bugatti wheels. "All of the modifications make the Pur Sport1's handling more accurate, direct and predictable. Lower unsprung masses result in improved grip because the wheel maintains contact with the road surface more easily. Anyone behind the wheel will immediately feel its lightweight character through bends", Jachin Schwalbe, Head of Bugatti Chassis Development, adds. An accomplished interpretation of "form follows performance".

New tyre development

Bugatti and Michelin developed the new and exclusive Bugatti Sport Cup 2 R tyre in 285/30 R20 dimensions at the front and 355/25 R21 at the rear to match the new Aero wheel design. Thanks to a modified tyre structure and a rubber mix that creates more grip, this combination boosts the vehicle's lateral acceleration by 10% to additionally increase its cornering speed.

Uncompromising chassis and suspension setup

Bugatti specifically configured the chassis and suspension to be uncompromising on winding roads – without any detrimental effect on comfort. A new chassis setup featuring 65% firmer springs at the front and 33% firmer springs at the rear, an adaptive damping control strategy geared towards performance as well as modified camber values (minus 2.5 degrees) guarantee even more dynamic handling and added agility in bends. Carbon-fibre stabilisers at the front and rear additionally minimise roll. "This setup makes the Chiron Pur Sport1 steer more directly and accurately through bends and maintains the grip levels for a very long time – even at high speeds. In conjunction with 19 kilogrammes of weight reduction of the unsprung masses the Pur Sport almost glides across roads", Jachin Schwalbe explains. In addition to the wheels' weight reduction totalling 16 kilogrammes, titanium brake pad base panels cut the vehicle's weight by a further two kilogrammes while brake discs strike yet another kilogramme off the total weight. "These 19 kilogrammes fully contribute towards the performance. Less weight results in more grip and tangibly more comfort, as adaptive dampers are forced to deal with lower masses to thus be able to maintain the wheels' contact with the road surface more easily", Jachin Schwalbe adds. Engineers have guaranteed more direct contact with the road surface by making the connection between chassis, suspension and body 130% firmer at the front and 77% firmer at the rear.

Apart from the four familiar EB, Motorway, Handling and Sport drive modes, the Chiron Pur Sport1 features the new Sport + drive mode to make this enhanced performance more emotionally tangible. In contrast to Sport mode, the traction control system kicks into action on dry race tracks at a significantly later point in the new mode aimed at more skilled cornering experts, making it possible for drivers to change their personal





driving style even more than before from razor-sharp ideal lines to drifts, also through fast corners.

New transmission development

A new transmission featuring an overall gear ratio that has been configured 15% closer together guarantees even more dynamic handling and further improves the power distribution of the 8.0-litre W16 engine generating 1,500 horsepower and 1,600 newton metres of torque. The vehicle now unleashes its full power at 350 km/h. “We were forced to reduce the speed as a result of the vastly increased downforce, generated by the new rear spoiler”, Schwalbe explains. 80% of the transmission has been revised while the entire gear set including four shafts and seven forward gears has been adapted to the new conditions. “We reconfigured each gear and calibrated new ratios despite this iconic engine boasting an abundance of power. The gears are closer together now to enable shorter gear jumps and also benefit performance. Most of all when coming out of corners the Chiron Pur Sport1 accelerates even more aggressively in conjunction with the added grip as well as the more direct chassis and suspension”, Gregor Gries says as the Head of Major Assemblies at Bugatti. At the same time Bugatti has increased the maximum engine speed of the W16 unit by 200 rpm to 6,900 rpm. In conjunction with the closer overall gear ratio this creates significantly better elasticity. As a result, the Chiron Pur Sport accelerates from 60 to 120 km/h almost two seconds faster than the already lightning-fast Chiron2. All in all the elasticity values are 40% better compared with the Chiron2.

Production output and cost

2020 will be a special year for Bugatti. The French manufacturer based in Molsheim will be delivering the first Bugatti Divo1 vehicles this year, a creation showcased at Pebble Beach in 2018, as part of a limited small-scale series totalling 40 units. Production of the Chiron Pur Sport1 will start in the second half of 2020. Limited to 60 units at three million euros excluding VAT. “With the Chiron Pur Sport1 we are showcasing an outstanding vehicle that makes your heart race shortly after having started the engine to push the limits of driving physics even further to the limit than any vehicle ever has done before. This means we have come full circle, back to the good, old Bugatti tradition”, Stephan Winkelmann adds confidently. ■





GOTTLIEB DAIMLER

A pioneer in global mobility

His very last era was once again nothing shy of success as Gottlieb Daimler invented the high-speed petrol engine in 1883/1884. In 1885, he utilised the new powertrain in the “Reitwagen” (riding car) – the world’s first motorised two-wheeler. And in 1886, he turned a horse-drawn carriage into the first four-wheeled automobile with his engine. Daimler-Motoren-Gesellschaft (DMG) was founded in Cannstatt in 1890, and in the space of just ten years, it became the world’s leading manufacturer of luxury cars. In April 1900, the products were given the legendary name “Mercedes” – Gottlieb Daimler, sadly, was not around to witness this as he died of a heart condition on 6 March 1900. His last twenty years were well spent, however, during which time he achieved many great things together with engineer Wilhelm Maybach. One very significant innovation was the high-speed petrol engine in 1886, which ultimately made the Daimler name synonymous with inventing the automobile. Carl Benz, meanwhile, was also busy at this time presenting his patent motor car.

From top manager to start-up founder

Gottlieb Daimler was 48 years old when he set up his experimental workshop in the greenhouse of his villa in Cannstatt, and started working on the high-speed, four-stroke engine in the summer of 1882. At this time, he had already made a name for himself as he could look back on a successful career as an engineer and manager. His most recent position was as technical director and board member of Gasmotoren-Fabrik Deutz AG. The son of a baker, Gottlieb was born on 17 March 1834 in Schorndorf, Germany and later enjoyed an excellent technical education, including earning a degree in mechanical engineering, which he used as a solid starting point to build his career. The inventor was also very cosmopolitan as he sought to gain valuable practical experience in France and Great Britain at a young age. During his time working for Deutz, he also visited Russia, attended the World Exhibitions in Paris and Chicago in 1889 and 1893, respectively, and corresponded with his French

business partner Louise Sarazin in her native language.

After leaving Gasmotoren-Fabrik Deutz in late 1881, the then top manager could have easily taken another well-paid management position elsewhere. Instead, he took a bold risk to become an entrepreneur himself and founded what would now be called a “disruptive” start-up: his goal was nothing less than to revolutionise mobility on land, water and in the air. To this end, a powerful and lightweight yet reliable engine was the key. Carl Benz was also pursuing a visionary approach but, unlike Daimler, did not focus on developing a universal engine as he instead had his eyes set on achieving widespread mobility with the automobile. The general public was initially sceptical to these ideas and often rejected them.

Today, we know that, against all odds, both inventors turned their dreams into a reality. Carl Benz witnessed the merger of Daimler-Motoren-Gesellschaft with Benz & Cie. in 1926, which gave rise to Daimler-Benz AG – a company that later became a global player, whose exceptional products were based on the fundamental ideas put forth by both inventors. Benz was also around to see the triumph of the internal combustion engine as it made global mobility a reality with vehicles, ships and planes criss-crossing the planet. Carl Benz died on 4 April 1929.

Daimler AG, meanwhile, continues down the path of its founding fathers by shaping the future of mobility, leveraging the company’s idealist heritage. To this end, Daimler AG actively pursues the CASE (Connected, Autonomous, Shared and Electric) strategy with its centrally linked topics. The challenges currently being faced are reminiscent of the goals Daimler and Benz successfully achieved back in 1886, when they ushered in a new form of mobility. “We are in the midst of tackling far-reaching changes as the automotive industry undergoes a massive transformation,” affirmed Ola Källenius, Chairman of the Board of Management. With the Mercedes-Benz VISION EQS, the brand shows a car concept to provide a glimpse of what sustainable luxury can look like in the future. ■



Foto/Quelle: © DAIMLER AG

Thirty years ago, the Mercedes-Benz
190 E 2.5-16 Evolution II debuted

EVOLUTIONS in theory and in practice





ADAC ADAC

S. Rauties
K. Ludwig

2019
SEVETTE CLASSIC
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Mercedes-Benz
Classic Collection





Impressive première 30 years ago: In 1990, Mercedes-Benz launched the 190 E 2.5-16 Evolution II from the 201 model series. The high-performance sports saloon was the road-legal version of the DTM touring race car of the same name. The saloon, built in a small run of only 502 cars and always finished in blue-black metallic, can easily be recognised by its mighty rear wing for motorsport use.

Compact sports car: The 190 E 2.5-16 Evolution II with 173 kW (235 hp) changed the public's view of the "Baby Benz". The sports car, usually referred to by its fans simply as the "EVO II", finally established the successful compact class of the 201 model series up amongst the high-performance cars in this market segment 30 years ago. Its status was also reflected in the price: Customers with sporting ambitions had to spend at least DM 115,259.70 for an EVO II, according to the price list. By comparison, The 190 E 1.8 of the 201 model series (80 kW/109 hp), designed to appeal to a youthful target group and about half as powerful, was available for less than a third of that price.

Motor Show début: The EVO II made its public début at the Geneva Motor Show from 8 to 18 March 1990. One year earlier, Mercedes-Benz had presented the 190 E 2.5-16 Evolution ("EVO I"), also designed as a road-legal version of the touring race cars used in the DTM events. At least 500 of a model type must be built to meet the specifications. The Mercedes-Benz 190 E 2.3-16, launched in 1984, served as the base model.

Power pack: The 173 kW (235 hp) four-cylinder M 102 engine was further developed on the basis of the EVO I unit under the direction of Dr Jörg Abthoff, head of advance engine development, and his colleagues Rüdiger Herzog, Dag-Harald Hüttenbräucker and Rudolf Thom. That engine had a shorter stroke (82.8 millimetres) and a larger bore (97.3 millimetres) than the engine in the 190 E 2.5-16 model series. Two metal catalytic converters were now standard equipment in the EVO II. The governed maximum engine speed was now 7,700 rpm which was made possible, amongst other things, by reduced connecting rod weight, four instead of eight crankshaft counterweights and conversion of the camshaft drive from a duplex to a simplex roller chain.

Rear wing: Its striking rear spoiler made the EVO II probably one of the most eye-catching Mercedes-Benz production cars in 1990 since the 300 SL "Gullwing" (W 198) from 1954. The box-shaped spoiler was developed by aerodynamics engineer Rüdiger Faul (Mercedes-Benz Development in Sindelfingen) together with Professor Richard Läpple from Stuttgart University of Technology. To optimise the stabilising downforce on the rear axle, the spoiler had a retractable flap on the upper crossbar. The lower spoiler strip at the rear could be tilted and the front spoiler was adjustable in two stages in the longitudinal direction.

Sports package: Amongst the modifications applied, the EVO II was fitted with additional body stiffeners and larger 17-inch wheels with a view to DTM racing. The aerodynamic modifications provided additional downforce compared to the EVO I:

The maximum rear axle downforce of the EVO II as a result of the spoiler was up to 57.1 kilograms. On the front axle, it was up to 21.2 kilograms.

Grand engine finale: The engines for use in the DTM were derived from the in-line four-cylinder engines used in the production vehicles. However, output was boosted from 173 kW (235 hp) in the production EVO II to up to 274 kW (373 hp). This was destined to be the last DTM engine designed in the engine development department at Mercedes-Benz: From then on, AMG took over this development task.

Praise from the critics: The EVO II met with a positive response in the trade

press. "Automobil Revue" enthused on 23 August 1990: "Even when you reach the critical limit, this four-door sports car demonstrates largely neutral over- and understeer characteristics that are hardly affected at all by load changes. If deliberately pushed, the EVO II can be encouraged to produce well-controlled oversteer." Trade magazine "auto motor und sport" had this to say in its 15/1990 issue: "The 190 E 2.5-16 is a real g-machine of the finest kind and by far the most manoeuvrable Mercedes. Its softened suspension also provides a level of comfort that can indeed be measured by Mercedes standards and is astonishing for a saloon that is constructed for very active driving."

Sports successes: The DTM touring race cars derived from the 190 E 2.5-16 Evolution II fully met expectations. The EVO II celebrated its racing début on 16 June 1990 on the Nordschleife of the Nürburgring. For the last DTM race of the season, on 15 October 1990 at the Hockenheimring, all the works teams were equipped with the EVO II. Kurt Thiim achieved the first victory for the car on 5 August 1990 in the first run of the airfield race in Diepholz. In 1991, Klaus Ludwig became DTM runner-up in the EVO II, and in 1992, he won the DTM drivers' championship ahead of Kurt Thiim and Bernd Schneider. In the 1992 championship season, Mercedes-Benz drivers won no less than 16 of a total of 24 DTM races with the EVO II. ■





Foto/Quelle: © Daimler AG



DAIMLER TRUCKS 200,000th Western



...delivers its Western Star



Daimler Trucks has reached the 200,000 mark in Western Star truck deliveries in the USA. The iconic US trucks with their striking front-end design and characteristic chrome look are used in North America predominantly as special vehicles and construction site vehicles in the vocational trucks segment. Western Star trucks are generally „custom made“ vehicles manufactured specifically in accordance with the body requirements of the customers and are particularly well-known for their robustness and resistance under harsh conditions. The anniversary vehicle – a Western Star

4700 SB with waste water disposal body – was handed over to customer Joe Johnson Equipment at the plant in Portland (Oregon). Joe Johnson Equipment is a leading supplier for infrastructure maintenance equipment in North America.

Western Star was founded in 1967 in Cleveland (Ohio) as a manufacturer of trucks for use in the wood and oil industries. In 2000, Daimler Trucks North America took over the brand. The first 100,000 vehicles were sold by Western Star over the course of 39 years and a further 100,000 trucks have been sold to customers over the 14 years since 2006. ■

MORGAN PLUS 4 ANNIVERSARY E



CLOSE UP

70TH EDITION





Foto/Quelle: © Morgan Motor Company

The Morgan Motor Company has built the first of its limited-run Plus 4 70th Anniversary Edition models. The four cars, the first of just 20 examples to be built, were completed at Morgan's factory in Malvern Link, UK, last week.

Built to celebrate 70 years of Plus 4 production, each of the anniversary models will be individually numbered and built in a unique specification with several notable details.

The production of the Plus 4 70th Anniversary Edition models follows the launch of the all-new Plus Four earlier in March 2020, which is underpinned by Morgan's latest CX-Generation aluminium platform. The new Plus Four is referred to with a wordmark as opposed to the numerical reference of its predecessor, and will replace the outgoing 4/4, Plus 4 and Roadster.

The introduction of the new model means that the Plus 4 70th Anniversary Edition models will be the last to be built on Morgan's traditional steel frame chassis, a version of which has been in production since the Morgan 4-4 was introduced in 1936. For a short period of time, the last of the traditional steel chassis Plus 4 models are being built alongside the first of the CX-Generation platform Plus Four models.

First built in 1950, the Plus 4 is one of the company's best-selling models throughout seven decades of production, and is admired by fans of Morgan worldwide. For the first time ever, the chassis will be painted in gold, highlighting its significance in Morgan's 111-year history. Just 20 Plus 4 70th Anniversary Edition cars are to be built. They feature an individually numbered plaque, marking them out for years to come as some of the last steel-chassis Plus 4 models. A specially embroidered headrest will further differentiate the edition.

The company's in-house design team has created a unique specification that provides a timeless, sophisticated look, and nods to Morgan's rich past. Platinum Metallic paint – a platinum anniversary being a celebration of 70 years – complements the satin dark grey wire wheels, while a motorsport-inspired front valance and exterior black pack including a black stone guard, A-pillars and sidescreens form a purposeful aesthetic.

Inside the car, the finest grade of leather has been sourced exclusively for the Plus 4 70th Anniversary Edition. The interior is further enhanced by a Ravenwood veneer dashboard, dark grey box weave carpets and a satin black Mota-Lita steering wheel.

Other specified extras include a leather-trimmed steering cowl and door handles, mohair hood cover, and sidescreen storage bags. Heated 'performance' seats, footwell lighting, and an exclusive commemorative Photographic Build Record are also included with the car. To match the 70th Anniversary Edition's dynamic look, its performance and distinctive engine note have been proportionally enhanced. The cars come with an engine map configured by Aero Racing, Morgan's in-house motorsport specialists, raising power from 154bhp (115kW) to 180bhp (134kW), and taking its 0-62mph (0-100kph) acceleration time down to less than seven seconds. Alongside this, the cars are fitted with an Aero Racing sports exhaust, finished with a ceramic-black tail pipe, allowing the engine to truly sing.

Steve Morris, Morgan Chairman and CEO, said: "It has been fantastic to witness the first Plus 4 70th Anniversary models complete production. They represent the last steel chassis models, and we are delighted to be able to celebrate such a significant milestone in this way. It's a poignant moment as the first CX-Generation Plus Four models are built alongside the final steel chassis Plus 4 models. We feel that both models represent the true qualities of a Morgan sports car."

Jonathan Wells, Morgan Head of Design, said: "As the design team creating the Plus 4 70th Anniversary Edition, our aim was to create a classic look, yet one that exudes the significance of what it represents. A mix of premium tones, high-quality materials, and exquisite details reflect the essence of the venerable Morgan Plus 4, and provide a fitting tribute to the steel chassis that has formed its backbone since it was launched in 1950."

The Plus 4 70th Anniversary Edition is priced at £60,995.00 inc. VAT in the UK, and deposits have already been taken on every one of the 20 cars. ■





FIN
BOX

WORLD HEAVY- WEIGHT CHAMPION ANTHONY JOSHUA

GETS FIGHT-READY WITH BESPOKE RANGE ROVER SV AUTOBIOGRAPHY

CHLEY
ING CLUB







Land Rover has created a one-off Range Rover SV Autobiography for world heavyweight champion Anthony Joshua OBE. The bespoke luxury SUV made its world premiere outside the Finchley Boxing Club in Barnet, north London, where Joshua started his journey to the world heavyweight title, and will transport the reigning champi-

on to his next title defence this summer.

A series of unique details set Joshua's luxury SUV apart, with the boxer's four world heavyweight championship titles recognised alongside his family crest on a special B-pillar badge. The circular design is engraved with the IBF, WBA, WBO and IBO initials while Joshua's signature is embroidered on the headrests of all

four seats inside.

Joshua has just confirmed details of his next fight, against Bulgarian challenger Kubrat Pulev at the Tottenham Hotspur Stadium in London on 20 June. His specially commissioned Range Rover SV Autobiography long wheelbase will make his ride to the fight as comfortable as possible.



Anthony Joshua said: “The countdown to my next fight has begun and this custom Range Rover will play its part in the build-up. With family and media commitments here in London and my training base in Sheffield, I spend lots of time on the road. The SVAutobiography will take the stress out of long trips, allowing me to relax in complete comfort, and its unique design features both my family crest and references to my boxing success and I have to thank the team at Land Rover Vehicle Personalisation for taking my ideas and making them real.”

The unique model features distinctive Bespoke Black paintwork with a matching roof and door mirrors while a Graphite Atlas front grille, side vent graphics and door handles maintain the stealthy appearance. Purposeful 22-inch split-spoke alloy wheels with a Diamond Turned Finish and contrasting Red brake callipers complete the exterior, with the Union Flag badges on the front fender vents bearing the number 258 – a subtle reference to Joshua’s management company.

Opening the doors reveals a circular B-pillar badge bearing Joshua’s family crest. The Ebony Windsor Leather seats with Pimento quilted inserts and contrast stitch continue the purposeful theme of the exterior.



SPORT UTILITY VEHICLE

Custom details help to identify the famous owner of the one-off SVAutobiography, each specially developed by the expert designers and craftsmen and women at Land Rover Special Vehicle Operations. These include a commissioning plaque on the centre console bearing the AJBXNG graphic and personalised illuminated treadplates. The aluminium trim finisher on the dashboard has also been engraved with Joshua's name while the interior door handles have been etched with a unique boxing glove motif.

Joshua's signature is embroidered on the headrests in contrasting Pimento stitching. The SVAutobiography features 24-way adjustable front seats with Executive Class Comfort-Plus airline-style rear seats with heated calf rests and hot stone massage function for first-class luxury on every trip.

Power comes from a 565PS V8 Supercharged engine for smooth power delivery and peerless refinement. Joshua can control the latest Touch Pro Duo infotainment using either the central front touchscreens or, when travelling in the rear, from the 10-inch Rear Entertainment Screens mounted in the front headrests.

All Range Rover SVAutobiography models are hand-finished at the Special Vehicle Operations Technical Centre in Coventry and the vehicle personalisation team helps customers to specify their own unique commission, working with a Land Rover designer. To find out more, click here: <https://www.landrover.co.uk/special-vehicle-operations/special-vehicles.html> ■



MERCEDES BENZ C 111

50th anniversary of the premiere at 1970 Geneva Motor Show



ES 11-11

Geneva Motor Show





STREET CLASSICS



Fascinating sports car icon and media favourite, laboratory on wheels for the development of the Wankel engine and testing new technologies and, last, but not least, legendary record-breaking car: the Mercedes-Benz C 111 is all this and much more. Its second development stage, C 111-II, featuring the quadruple-rotor variant (four times 602 ccm flow chamber volume) of the M 950 F rotary piston engine generating 257 kW (350 hp) will be celebrating a special anniversary this year.

Premiere: The supersports car was introduced 50 years ago at the 40th Geneva Motor Show between 12 and 22 March 1970. The new, merely 1120-millimetre-high vehicle with gullwing doors and a wheelbase of 2620 millimetres features a glass-fibre reinforced plastic (GFRP) body screwed to the sheet steel underbody frame. Its top speed is 300 km/h. It remains a major public attraction to this day: experience a Mercedes-Benz C 111-II featuring the characteristic “Weissherbst” paintwork at the Fascination of Technology exhibition section of the Mercedes-Benz Museum.

Improved development: The C 111-II was developed on the basis of the C 111, which was presented in autumn 1969. In terms of technology, it is particularly characterised by the quadruple-rotor Wankel engine, a genuine sports engine. The Design department, headed up by Bruno Sacco and Josef Gallitzendörfer, started work in summer 1969. Compared to its predecessor, they improved the driver’s field of vision by modifying the mudguards, roof and boot lid. The vehicle’s aerodynamics were also streamlined: wind tunnel measurement showed that the vehicle’s drag had been reduced by eight per cent compared to its predecessor. The C 111-II’s interior impresses with contemporary aesthetics. The dream car underlines its suitability for everyday use with features such as space for one large and two small suitcases from the Mercedes-Benz suitcase set.

Dream car: The C 111 is a highlight from the outset. Consequently, the plan set out by the Board of Management of what was then Daimler-Benz AG wor-

Foto/Quelle: © Daimler AG







ked out well: its members decided on 20 May 1969 that, as a dream car, the C 111 would be showcased to the public between 11 and 21 September 1969 at the International Motor Show (IAA) in Frankfurt am Main. Following its sensational debut, the C 111 attended numerous other trade fairs and exhibitions: the Paris Motor Show, London Motor Show (October 1969), Turin Auto Show (October/November 1969), Jochen Rindt Show in Vienna (November 1969) and Essen (December 1969), Brussels International Motor Show (January 1970) and Chicago Auto Show (February 1970). The evolved version C 111-II then premiered in Geneva in March 1970.

Blank cheques: Wealthy sports car aficionados are prepared to pay considerable amounts for a C 111. For instance, in London in 1969 an automotive enthusiast already offered to pay up to half a million German marks. Blank cheques were even delivered to Stuttgart over the following months. However, the brand made clear that this experimental vehicle was not for sale. Right at the beginning of its career, what would later be known as the C 111 (with the internal Mercedes-Benz designation C 101) was intended for a

totally different target group: as early as 1963 initial thought had been given to a Wankel engine in a “small, affordable sports car” to be positioned below the “Pagoda” SL (W 113). The strategy was defined in more detail in 1968 as a “small, sporty vehicle” without any particular comfort features that is also suitable for rally sports and aimed at “young people”.

Driving experience: Fifty years ago in Geneva visitors were not only marvelling at the C 111-II as an exhibition highlight, they also witnessed it in motion as Mercedes-Benz brought two of a total of five planned experimental vehicles from the second series to the Motor Show. The prototype with internal number 31 and thus the first C 111-II could be experienced as part of the press demonstration on 10 and 11 March 1970 at Circuit de Monthoux near Geneva in demonstration test drives.

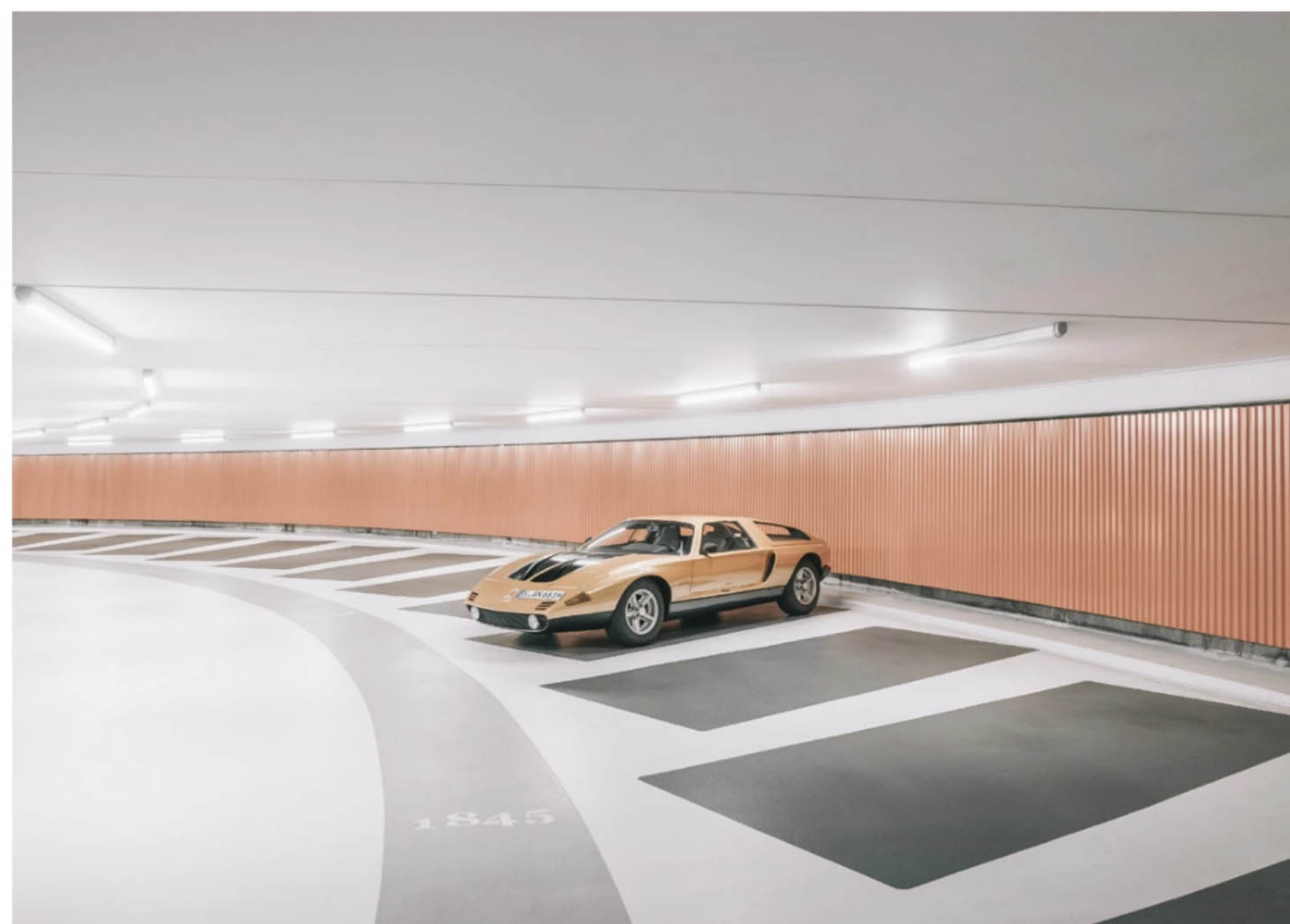
Digital: The C 111 had not only been designed with a futuristic shape. It is also the world’s first vehicle that had been completely designed on a computer. For this purpose, engineers used the ESEM method (elastostatic element method), a finite element method (FEM) variant

developed at Mercedes-Benz. The digital technology even made it possible to calculate dynamic loads. Mercedes-Benz estimates that the development period was cut by around four months by using this method. The in-house documentary film production “Das Auto, das aus dem Computer kam” (the car from the computer) introduced the innovation.

V8 instead of Wankel engine: December 1970 saw the installation of a Mercedes-Benz 3.5-litre V8 reciprocating engine in the C 111-II instead of the Wankel engine. This Mercedes-Benz Classic vehicle means the C 111 can still be dynamically experienced to this day, as it still attracts attention at events for automotive classics. A C 111-II dating back to 1975 represents a further unique vehicle forming part of the company-owned vehicle collection: its floor assembly consists of a sandwich design with two glass-fibre-reinforced synthetic resin shells with a thickness of only a few millimetres that form a core structure on the basis of polyurethane foam.

Butter and skis: Compared with its predecessor the C 111-II boasted a number of convenient details. This was particu-







larly important to Rudolf Uhlenhaut, head of the Mercedes-Benz Passenger Vehicle Development department. In addition to the regular boot, the vehicle provided space to accommodate one item of luggage on the boot lid, secured by straps, as well as the option to transport skis. Uhlenhaut also put the C 111-II through a practically-orientated “butter test”: in this process, the vehicle is driven quickly while trying to establish whether a pack of butter placed in the boot melts as a result of the combustion engine’s dissipated heat despite the boot’s insulation.

Showing its colours: Nowadays the C 111-II and its predecessor have shaped a

public image as vehicles associated with the orange metallic “Weissherbst” paintwork. However, at the end of the 1960s, thought was initially given to “Vermillion” paintwork and rally stripe patterns. In 1969 the C 111 initially premiered with a white special-effect paint and bright orange highlights. Yet, by the debut of the C 111-II in Geneva 50 years ago, the “Weissherbst” paintwork had won out as the characteristic colour.

Record-breaking vehicle: The development of a supersports car featuring the Wankel engine was no longer pursued at Mercedes-Benz after the C 111-II and its equivalent with a plastic floor assembly. However, the star of the experimental

vehicles still shines brightly. It formed the basis for the very successful, record-breaking vehicles C 111-II D (1976), C 111-III (1977) and C 111-IV (1979).

Fresh off the press: The “Mercedes-Benz C 111” publication will give new insights into the development of the dream car and record-chasing vehicle. The book will be published soon by Motorbuch Verlag Stuttgart. The publication is based on in-depth research as well as comprehensive, detailed information and photographs from the Daimler AG archives, including many previously unpublished images to document the entire development history of this fascinating vehicle for the very first time. ■

BMW CONCEPT STAY AHEAD



CEPT i4. IN STYLE





The BMW Group is opening a new chapter in its history with the unveiling of a pure-electric Gran Coupe in Geneva. The BMW Concept i4 takes electric drive to the core of the BMW brand and heralds a new era in Sheer Driving Pleasure. The BMW Concept i4 represents a look ahead to the BMW i4, slated to enter production in 2021 as the BMW Group's first all-electric model in the premium midsize class. It provides a whole new take on the dynamic excellence for which BMW is renowned and blends a modern, elegantly sporty design with the spaciousness and functionality of a four-door Gran Coupe – all while generating zero local emissions. Film composer Hans Zimmer provided the soundtrack to the world premiere in Geneva and used the press conference to present the unique electric drive sound for the BMW Concept i4.

“The BMW Concept i4 brings electrification to the core of the BMW brand,” says Adrian van Hooydonk, Senior Vice President BMW Group Design. “The design is dynamic, clean and elegant. In short: a perfect BMW that happens to be zero emission.” The drivetrain's standout numbers include a range of 600 km (373 miles), output of up to 530 hp, 0 – 100 km/h (62 mph) acceleration of approximately 4.0 seconds and a top speed in excess of 200 km/h (124 mph). However, the driving qualities of the BMW Concept i4 cannot be expressed in figures alone. The virtually silent delivery of power creates an entirely new sensation of dynamism.

“The design of the BMW Concept i4 shows fantastic proportions, a powerfully expressive character and, of course, a lot of attention to detail,” adds Domagoj Dukec, Head of BMW Design. “With the Curved Display, we have redefined BMW's signature driver focus in an extremely elegant way. At the same time, the BMW Concept i4 transports a feeling of sustainable driving pleasure.” As part of the package, the Concept i4 includes several exterior and interior design elements which will make an appearance in both the BMW i4 and other electrically-powered production vehicles.

The exterior – electrifying aesthetics.

The modern, elegant exterior represents a deliberate counterpoint to the dynamic flair of the driving experience. The perfectly resolved Gran Coupe proportions create an authentic, modern and confident appearance. The long wheelbase, fastback roofline and short overhangs form a basic profile brimming with elegance and dynamism. With its four doors, the BMW Concept i4 offers not only a high level of everyday usability and practicality, but also a much larger interior than the car's modern and dynamic proportions would immediately suggest.

Clear surfaces and aerodynamic details.

Crisp, smooth lines and taut volumes merge into a rich, smoothly contoured sculpture and create a clear surfacing language. The modern exterior paint shade Frozen Light Copper reprises a colour nuance displayed by the BMW Vision iNEXT and showcases the interplay of surfaces to visually stunning effect. Blue elements in the front end, flanks and rear end point to the car's BMW i origins. They shine a spotlight on the signature BMW i icons and bring the technology below the surface to the fore – for example, the kidneys in their role as an intelligence panel, the mouldings in the side skirts concealing the battery technology, and the diffuser elements in the rear end, which fill the design space vacated by exhaust tailpipes and enhance aerodynamic efficiency.

A host of other aerodynamic measures maximise the car's electric range. The blanked off kidney grille and clear aero lips provide detail examples of sophisticated airflow engineering at work. Another distinctive area of the car are the wheel rims. These have been designed exclusively for the BMW Concept i4 and blend aerodynamic and lightweight design; smooth – and therefore aerodynamically optimised – surfaces contrast with ultra-low-weight, high-strength spokes. The rims extend the car's palette of colours and materials, emphasising its luxurious overall character.

The front end – the eye-catching face of a new era. The front-end treatment of the BMW Concept i4 presents the familiar BMW icons in a new look, lending a visually powerful face to the electric age at BMW. The prominent, closed-off kidney grille provides a tangible connection between the past and future of BMW. The BMW icon also gains new functionality: With no combustion engine to require cooling, the grille now serves primarily as an “intelligence panel” housing various sensors. The grille teases the technology behind the scenes with a special design for this model. The headlights likewise provide a bridge between the past and the future; the classical four-eyed front end is reprised here with a very modern and pared-back interpretation. Two intricate, freestanding LED elements on either side integrate all of the requisite light functions. Clean surfaces and a small number of crisp lines around the grille create a contemporary front-end graphic with considerable visual impact. A BMW i-style blue accent in the grille surround sets the seal on the front-end styling.

Taking the first steps with the new BMW brand identity.

BMW is unveiling the brand's new look for the first time at the Geneva Motor Show. The new logo for







communications also provides the basis for the badge on the BMW Concept i4. Its two-dimensional and transparent design ensures seamless integration and brings the special exterior colour shade Frozen Light Copper to even greater prominence. The concept car not only has the task of looking ahead to the future in terms of aesthetics, technology and innovation, it also explores the design potential within our BMW trademark.

Striking rear end with aerodynamic features.

The rear of the BMW Concept i4 sits low over the road and cuts a broad, horizontally emphasised figure. The surfaces

progress across the rear in a smooth and luxuriant movement, and give it a very modern and calm appearance. The long, slim L-shaped rear lights continue the theme. Below the rear lights, the inward-angled surfaces form aerodynamics-enhancing lips and incorporate vertical air outlets. The verticality of the design here emphasises the car's sporting stance. Further down, the rear apron has a forceful presence and enhances aerodynamic efficiency. Where exhaust tailpipes would once have been found, diffuser elements in BMW i Blue indicate the presence of a pure-electric drive system and reference the design of the BMW i Vision Dynamics.

The interior – innovation meets minimalism.

The interior of the BMW Concept i4 focuses on those times when the driver chooses to pilot the car themselves. To this end, every element in the front of the cabin is trained on the driver. The new Curved Display teams up with the steering wheel to reveal a new take on driver orientation and offers a look ahead to the display in the production versions of the BMW iNEXT and BMW i4. Here, the presentation surfaces of the information display and Control Display merge into a single unit inclined towards the driver. This screen grouping optimises presentation of infor-



mation and makes the display's touch operation more intuitive. Advanced display tech with non-reflective glass also removes the need for a shroud to shade the displays and therefore contributes to an extremely uncluttered and airy cockpit.

The Curved Display encompasses a large proportion of the section in front of the driver and above the centre stack, and gives the front area a very modern appearance. Its slim, borderless form exudes quality and sophistication. Almost all operating functions are integrated into the display as part of an overall approach centred on reducing the number of haptic controls to the minimum. Even the climate control system now works by touch control.

Focus on the essential.

The front section of the interior around the Curved Display also majors on pared-back design. The understated use of different materials and the fundamental arrangement of controls creates a modern yet also luxurious ambience. With this in mind, elements such as air outlets are integrated almost invisibly into the overall geometry and concealed behind strong patterns. Accent strips in warm Gold Bronze blending to chrome lend the interior a high-class touch. The central control panel replaces a traditional gear lever with a toggle-type shifter. Elements such as the iDrive Controller and seat memory buttons in the doors are finished in a classy crystal glass. The cloth/leather

combination for the seats – composed of microfibre with line graphics and natural leather tanned using olive leaf – sets a high-quality and sustainable seal on the interior. The overall result is a clearly structured, bright and airy cabin which brings across the tranquillity and authority of electric drive systems.

Spacious rear compartment.

Rear-seat passengers are greeted by a generously-sized compartment offering levels of headroom and legroom that exceed expectations of a coupe. Integral head restraints for the front and rear seats add further to the sporting feel. The cut-out in the head restraints is a classy detail that references sporty BMW models from the current line-up.

The rear seats extend the horizontal graphic emerging from the doors to create a lounge feel in the rear. Meanwhile, the outer seats reprise the dynamic form of the front seats, heightening the sporting flavour. They also use very little stitching, which further emphasises the clean and modern feel.

Further developed user interface design with Experience Modes.

The screen grouping with new Curved Display provides a digital gateway into the electric age at BMW. Look and feel are clearly influenced by the latest electronic devices and have been made deliberately less “automotive” in nature. In the display itself, flat layers provide considerable visual depth. Overall, the Curved Display and new presentation approach combine to provide a first-class content-viewing experience.

Three different Experience Modes enable users to explore the various facets of the electric drive system and provide a look ahead – in terms of visuals at least – to the next-generation operating system from 2021. The sometimes emphasised visual differentiation between the three Experience Modes (“Core”, “Sport” and “Efficient”) spans everything from how the user experiences the display and graphics to how the interior is presented. Ambient lighting in the dashboard, doors and (indirectly) below the display indicate the technical adjustments taking place.





FotoQuelle: © BMW AG

“Core” mode introduces the driver’s area to an updated interpretation of the four “widgets” familiar from the display concept of existing models. Here, the graphics reprise the pattern above the air vents and the Gold Bronze accent colour, consciously referencing the car’s interior design. In the area where the central display used to be positioned, a map and widgets now line up alongside one another. The user can navigate around the diagonal widgets using a swipe movement and arrange them intuitively by drag-and-drop. This allows them to adapt the display to their personal preferences.

In “Sport” mode, the “widgets” come closer together and create a focussed view. Sideways movements behind the zones are used to show how tight the next corner is, facilitating anticipatory driving. This form of content presentation also allows effective peripheral viewing. The

right-hand area of the display shows specific functions in a similar way to BMW M’s lap timer app.

“Efficient” mode debuts an “Assisted Driving View”, which shows the driver what the car’s sensors are detecting. This Experience Mode opens up deeper insights into the car’s technology, such as how it communicates with its surroundings. In the BMW Concept i4, the focus here is on anticipatory and efficient driving, and key information for efficient driving is incorporated. The right-hand area of the display shows additional vehicle information, such as the charge level and range

The sound of the BMW Concept i4.

The BMW Concept i4 is not only characterised by its individual design, but also by its own visionary and unique sound. It was developed under the brand name of BMW IconicSounds Electric by world

renowned composer Hans Zimmer together with BMW Sound Designer Renzo Vitale. BMW IconicSounds Electric aims to emotionalise BMW’s electric vehicles and make them audible using individual sound worlds. The sound of the BMW Concept i4 achieves this to perfection – it combines BMW’s past and future. It gives the driver the feeling that there are no limits of expression. The sound is manifold, surprising and it provides a sense of lightness and transparency. The sound worlds of the BMW Concept i4 range from the driving sounds in „Core“ mode to the more intense and pronounced sounds of „Sport“ mode. Also included are the sounds of the door opening and the starting scenario.

The technology as earmarked for the upcoming BMW i4.

Fifth-generation BMW eDrive technology is a defining feature of the BMW i4 and therefore also of future electric mobility. The BMW iX3 due to go into pro-

duction in 2020 will lead the way in the application of the new tech, which will be introduced in a number of electrically powered BMW vehicles – such as the BMW iNEXT and BMW i4. The electric motor, power electronics, charging unit and high-voltage battery using fifth-generation BMW eDrive technology are all new developments enabling the BMW Group to take another significant step forward in the field of electrified drive systems. The electric motor developed for the BMW i4 generates maximum output of up to 390 kW/530 hp, which ranks it alongside a current BMW V8 combustion engine. Its instantaneous power delivery gives the BMW i4 standout performance attributes and exceptional efficiency.

The fifth generation of BMW eDrive also brings a newly designed high-voltage battery with the very latest battery cell technology. The version of the battery developed for the BMW i4 impresses with its extremely slim construction and



optimised energy density. It weighs roughly 550 kilograms, has an energy content of around 80 kWh and achieves an operating range of up to 600 km (373 miles) in the WLTP cycle.

All in all, fifth-generation BMW eDrive technology sets new standards in terms of power density, efficiency and range in locally emission-free driving.

Series production of the new BMW i4.

Series production of the new BMW i4 will begin in 2021 at the BMW Group's main plant in Munich. This means that, in the future, combustion-engined vehicles, plug-in hybrids and all-electric vehicles will be manufactured on the same assembly line in Munich.

Integrating the BMW i4 into the existing production system represents a challenging task for Plant Munich. The body concept of the BMW i4 differs from the architectures of the vehicle models produced at the plant to date due to the need to accommodate its high-voltage battery. Approximately 90 per cent of the existing production equipment in the body shop can be incorporated into the process, i.e. adapted to manufacture of the i4. However, the remaining ten per cent – especially the machinery involved in building the rear structure – will need to be newly built.

A separate new piece of equipment will be fitted in the assembly halls for installation of the high-voltage battery, as the battery needs to be fitted in the car from below. A particular challenge in the conversion/installation process are the crowded structures of the assembly halls. Working within these tight confines, old machinery will have to be removed and new equipment installed and brought on stream within a six-week period. This requires long-term planning and precise implementation. ■





CLOSE UP



E-BULLI CONCEPT

A CROSSOVER OF HIGH-END CLASSIC
AND HIGH-TECH ELECTRIC VEHICLE



Volkswagen Commercial Vehicles (VWCV) unveils the e-BULLI concept, an all-electric vehicle that produces zero emissions on the road. Equipped with the drive system components of the latest Volkswagen electric vehicles, the concept vehicle is based on a T1 Samba Bus produced in 1966 and comprehensively restored. VWCV partner eClassics is planning to offer T1 conversions in the style of the new e-BULLI to European customers.

It started with the seemingly audacious idea of switching an historic Bulli over

to a drive system producing zero emissions on the road in order to bring it in line with the challenges of a new era. To this end VWCV engineers and designers formed a team along with drive system experts from Volkswagen Group Components and the eClassics company, which specializes in electric car conversions. As the basis for the future e-BULLI, the team chose a T1 Samba Bus produced in Hannover in 1966, which prior to its conversion spent half a century on the roads of California. One thing was certain from the start: the e-BULLI was to be a T1 that utilizes the Volkswagen Group's latest electric drive system components.

The 43-hp four-cylinder boxer engine gave way in the e-BULLI to a silent Volkswagen electric motor delivering 82 horsepower. The comparison of the engines' power output alone makes it very evident that the concept vehicle has completely new drive characteristics, as the electric motor is almost twice as powerful as the boxer. What's more, with maximum torque of 156 lb-ft, the new drive provides more than twice the force of the original T1 engine from 1966 (75 lb-ft). The maximum torque is also—as is typical for electric motors—immediately available. And that changes everything. Never before has there been an 'official'



T1 as powerful as this e-BULLI. New in this form, it thus becomes a silent cruiser that combines the fascination of a zero-emission drive system with the incomparable style of a classic Bulli.

Power transmission is by means of a single-speed gearbox. The drive system is coupled with the gear lever, which is now positioned between driver and front passenger seat. The automatic transmission's selector settings (P, R, N, D, B) are shown next to the lever. In position B, the driver can vary the degree of recuperation, i.e. of energy recovery when braking. The e-BULLI reaches a top speed of 80 mph (electronically limited). With the original drive system the T1 managed a top speed of 65 mph.

Just like the boxer engine of the 1966 T1, the combination of gearbox and electric motor integrated in the back of the 2020 e-BULLI drives the rear axle. A lithium-ion battery is responsible for supplying the electric motor with power. The battery's usable energy capacity is 45 kWh. Customized for the e-BULLI in collaboration with eClassics, a power electronics system in the back of the vehicle controls the high-voltage energy flow between the electric motor and the battery and in the process converts the stored direct current (DC) into alternating current (AC). In addition, the on-board electronics are supplied with 12 volts via a DC/DC converter.

All of the electric drive system's stan-

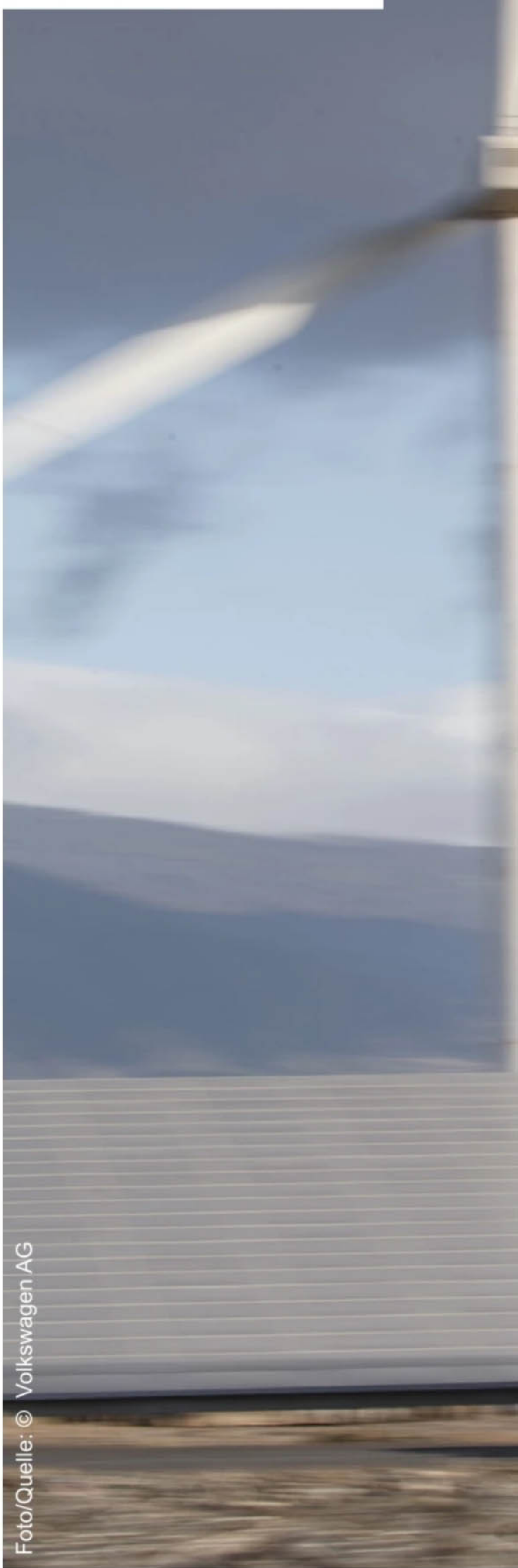
dard parts are being made by Volkswagen Group Components in Kassel. The lithium-ion modules are designed at the Braunschweig components site. They are transferred by eClassics into a battery system appropriate for the T1. As in the new ID.3 and future ID.BUZZ, the high-voltage battery is housed centrally in the vehicle floor. This layout lowers the e-BULLI's center of gravity and thus improves its driving characteristics.

The battery is charged via a combined charging system (CCS) socket. It enables charging with alternating or direct current. Alternating current: The battery is charged via an AC charger with charging power of 2.3 to 22 kW, depending on electricity source. Direct current: Thanks to



CLOSE UP





Foto/Quelle: © Volkswagen AG

the e-BULLI's CCS charging socket the high-voltage battery can also be charged at DC fast-charging points with up to 50 kW of charging power. In this case it can be charged up to 80 percent in 40 minutes. The range with a full battery charge is more than 124 miles.

New chassis for added comfort, greater safety and more dynamic handling compared to the T1, riding in the e-BULLI feels completely different. This is further enhanced by the chassis, which has also been redesigned: multi-link front and rear axles with adjustable shock absorbers and coilover struts, plus a new rack-and-pinion steering system and four internally ventilated disc brakes contribute to the new dynamic handling

being transferred to the road with serene poise.

Volkswagen Commercial Vehicles modified the exterior and interior design in parallel with the new electric drive system. An interior concept has been created for the e-BULLI that is both stylish and avant-garde. The new look, and corresponding technical solutions, were developed by the Volkswagen Commercial Vehicles design center in cooperation with VWCV Vintage Vehicles and the Communications department. The designers modernized the exterior of the iconic vehicle with great sensitivity and finesse, including giving it a two-tone paintwork finish in 'Energetic Orange Metallic' and 'Golden Sand Metallic

Matte'. Details such as the new round LED headlamps with daytime running lights communicate the transformation into the modern era. At the rear, there are also LED charge indicators, which signal to a driver walking up to the e-BULLI how much charge the lithium-ion battery still has even before they reach the vehicle.

It is only when you look through the windows into the eight-seat interior that you notice that a few things are not as you might assume them to be in a T1. Volkswagen Commercial Vehicles' designers have re-imagined a lot of the interior, without losing sight of the original concept. The seating is one of the new features. In keeping with the external







paintwork, it is also in two colors: 'Saint Tropez' and 'Saffrano Orange'. Positioned within a console between the driver and front passenger seat is the new automatic transmission selector lever. The start/stop button for the electric motor is also integrated here. Solid wood in the look of a ship's deck is used for the floor throughout. As a result of this and the nice bright leather tones, this electrified Samba Bus takes on a maritime feel. This impression is strengthened by the large panoramic folding roof.

The cockpit too has been sensitively modernized. The new speedometer is based on the original, while a two-digit display integrated into it creates a link

to the modern era. This digital display in the otherwise analogue speedometer provides the driver with a variety of information, including range. LEDs also indicate whether, for instance, the parking brake is on or the charging connector is plugged in. An additional detail in the center of the speedometer: a stylized Bulli symbol. A multitude of further information is shown via a tablet integrated into the roof console. Via Volkswagen 'We Connect' the e-BULLI driver can also call up information online by smartphone app or via a PC and a corresponding web portal such as on remaining charge time, current range, miles travelled, trip times, energy consumption and recuperation. Music on

board comes from an authentic-looking retro-style radio, which, however, is equipped with cutting edge technology such as DAB+, Bluetooth and USB. The radio is linked to a sound system with out-of-sight components, including an active subwoofer.

European customers who find the new e-BULLI an electrifying prospect can fulfil their dream of owning an emission-free T1 at eClassics. They are offering the T1 conversion, complete with redesigned front and rear axles, at prices starting from 64,900 euros. T2 and T3 conversions are being offered by eClassics too. The company is also offering qualified dealers a ready-to-fit parts kit. ■



THE BEAST IS THE ALL-NEW AU

SPORT UTILITY VEHICLE



AS A BEAUTY

AUDI RS Q8



Audi RS Q8 combines the genes of a high-performance RS model with the practicality of an SUV and the dynamic design of an Audi coupe. Featuring a bi-turbo V8 engine to deliver exhilarating performance and driving dynamics, the RS Q8 sets a new standard as the prestigious spearhead of the RS model line.

Powertrain and performance

The 4.0-liter V8 in the RS Q8 delivers an impressive 591 horsepower and 590 lb-ft of torque. The turbocharged engine accelerates the large SUV from 0-60 mph in 3.7 seconds and achieves a top track speed of 155 mph, or 190 mph when equipped with the RS ceramic brakes. The RS Q8 is currently the fastest production SUV to lap the renowned Nürburgring racetrack with an official time of 7 minutes and 42.2 seconds.

The 1-3-7-2-6-5-4-8 ignition sequence gives the engine a robust and unique sound. As is typical for RS models, the dual exhaust system features an oval tailpipe on each side. The driver can influence the engine's sound via the Audi drive select system. The optional RS sport exhaust system with black tailpipe trims offers an even sportier sound.

The power of the V8 flows to the quattro all-wheel drive system via the standard eight-speed Tiptronic® transmission, offering high-precision and dynamic handling through active torque distribution to both axles. This purely mechanical system transfers torque to the front and rear axles at a standard ratio of 40:60, and when required, can transfer the majority of the power to the axle with better traction. Up to 70 percent can be directed to the front wheels and up to 85 percent to the rear wheels.

Wheel-selective torque control helps to improve the agile handling of the large-SUV by providing additional traction modifications across each axle. During dynamic cornering, the quattro sport rear differential distributes drive torque between the rear wheels as required. This active torque vectoring helps improve traction, stability and dynamics.



Foto/Quelle: © AUDI AG



Suspension

The RS Q8 features standard adaptive air suspension with controlled damping allowing the large SUV to be equally at home on or off the paved roads. Its RS-specific damper tuning offers drivers a choice between long-distance comfort and high performance. Standard all-wheel steering allows for greater agility at low speeds and improved stability at high speeds.

The standard active roll stabilization helps to improve vehicle driving dynamics by actively distributing roll torque between the front and rear axles. When driving straight ahead, the two halves of the stabilizer are decoupled, which can reduce body movement on uneven roads and also help to increase ride comfort. During cornering, however, the halves of the stabilizer are twisted in opposite directions, which helps to reduce vehicle lean.

Drivers can customize their driving experience through the standard Audi drive select system with seven different profiles: comfort, auto, dynamic, allroad, off-road and the individually configurable RS-specific modes RS1 and RS2, which can be activated directly via the “RS-MODE” button on the steering wheel. The Audi drive select setting influences the engine and transmission management, power steering, the air suspension, all-wheel steering and engine sound. With variable ground clearance, short overhangs and hill descent control, the new Audi RS Q8 can carry on confidently when paved roads end.

Exterior and interior design

With the octagonal Singleframe grille and the RS-specific honeycomb design, the RS Q8 has an even more dominant appearance. This combined with the front air inlets in gloss black and the alu-optic front spoiler perfectly highlights the athletic character of the large SUV. The dynamic roofline ends in gently inclined D-pillars, which are supported by the wide, pronounced wheel arches, paying homage to the vehicle's quattro® DNA, creating an unmistakable Audi silhouette. An RS roof-edge spoiler provides a striking finish at the top and provides downforce on the rear axle for improved balance at high speeds. At the back of the vehicle, RS-specific rear bumpers with alu-optic diffuser trim and the signature RS model oval exhaust further differentiate the large SUV.

Additional interior and infotainment highlights include:

Every RS Q8 is standard equipped with ventilated RS sport Valcona leather seats with „RS“ honeycomb stitching. The perforated, heated RS sport leather steering wheel features new large RS aluminum shift paddles on either side of the wheel. Available Luxury package adds an Alcantara® headliner, fine Nappa leather accents on the center console, armrests and instrument panel, power rear window sunshades.

Standard Bang & Olufsen 3D Sound System with 17 speakers and 16-channel amplifier or available Bang & Olufsen 3D Advanced Sound System which delivers nearly true-to-life surround sound through 23 speakers, powered by the 23-channel BeoCore amplifier and ICE power amplifiers with a peak output of 1,920 watts.

Advanced driver assistance systems

The 2020 Audi RS Q8 offers a comprehensive suite of standard and available driver assistance systems including adaptive cruise assist, which combines the functions of adaptive cruise control, traffic jam assist and active lane assist. Standard Top view camera system with virtual 360 surround view assists the driver with maneuvering in tight spaces. Available Intersection assist helps monitor cross traffic when pulling through an intersection or at exit ramps and can help notify the driver of a potentially hazardous situation. ■



SPORT UTILITY VEHICLE



BENTLEY MULLINER CONVERTIBLE EQUIPMENT



R CONTINENTAL GT ESTRIAN EDITION

KDAWS CASTLE

RECEPTION



Bentley Mulliner has added to its new Collections portfolio with the creation of a truly bespoke Continental GT Convertible – the Equestrian Edition.

This one of a kind Continental GT Convertible embodies a myriad of distinctive features, building on the strengths of Bentley's iconic open top Grand Tourer. Inspired by the greatest racecourse in the world and home to the most exhilarating and prestigious event of the horse racing calendar, The Cheltenham Festival, the sole example of the Equestrian Edition has been specially commissioned by Bentley Bristol and hand built by Bentley Mulliner in Crewe. To celebrate the car's inspiration, it was recently photographed at Jackdaws Castle – the famous state of the art equestrian training facility and home of Jonjo O'Neill Racing, just 10 miles from Cheltenham Racecourse.

Sumptuous embroidery and artisanal marquetry rarefies the Equestrian Edition. Horse and rider silhouettes adorn all four seats, that are finished in the aptly named sustainable Saddle hide. A Cumbrian Green secondary hide complements the bespoke theme. The same horse and rider silhouette accompanies Bentley Mulliner branding in the front fascia, where lavish gold detailing stylishly accentuates the straight grain Walnut single veneer and box wood inlays.

Continuing the interior theme, the diamond quilting now synonymous with Bentley Mulliner is crafted utilising an authentic Tweed fabric, with a contrasting light blue stitch introducing a modern touch and providing a distinctive feature to the door inlays and rear quarter panels. Bentley Mulliner has applied their trademark branded treadplates to complete the bespoke interior of the Equestrian Edition.

To the exterior, a specially commissioned and distinctive shade of green called Spruce is paired with Blackline Specification, which replaces bright chrome with gloss black versions to all exterior brightware, bezels, radiator grill and exhaust outlets. Bold 22-inch Mulliner Driving Specification wheels in gloss black complete the specification.









The car comes equipped with both suites of Bentley's state of the art driver assistance technologies namely; Bentley Touring specification that includes Lane assist, Adaptive Cruise Control, Bentley Safeguard Plus, Night vision and Head-up display, and Bentley's City Specification incorporating Top view camera, Traffic sign recognition, City assist, Pedestrian warning, Reversing traffic warning, Automatic dimming mirrors and Hands-free boot opening.

Bentley Mulliner

Bentley Mulliner is renowned throughout the automotive world for crafting some of the most individual Bentleys ever created. Bentley Mulliner is the birthplace of coachbuilding – the oldest automotive coachbuilder in the world.

The experienced team, supported by in-house engineers and designers at Crewe, prides itself on a long history of fulfilling the desires and demands of Bentley customers worldwide.

A new three-portfolio structure sees an expansion of Bentley Mulliner in the coming months. While Bentley Mulliner Collections provides bespoke services to Bentley's existing model range, Bentley Mulliner Classic will deliver classic car restorations (such as last year's 1939 Corniche) and Continuation Series – starting with Bentley's iconic 1929 Team Blower. Finally, Bentley Mulliner Coachbuilt is defining the future of coachbuilding, and debuted the new Bentley Mulliner Bacalar at earlier this week. ■

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