



Sensual purity: How design showcases brands

Press Information

## Design Essentials II

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## Design showcases brands

Gorden Wagener has been Chief Design Officer of Daimler AG, Mercedes-Benz Cars, Vans & Daimler Trucks since 2016. After studying Industrial Design at the University of Essen, he went on to specialise in Transportation Design at the Royal College of Art in London. He joined the company in 1997. He sees an integrated approach to design as an essential basis for the work of a designer in order to showcase both the products and the brands at Daimler to perfection and to create a brand experience for customers.

**Mr Wagener, in recent years you and your team have redefined the design of the Daimler brands, creating fresh ideas and pointers for the entire industry in the process. What is the secret of your design language?**

We have been working on and with the design philosophy of Sensual Purity at Mercedes-Benz since 2009, continually evolving it as part of an ongoing process. This philosophy encapsulates an essential aspect of our brands - the bipolarity of intelligence and emotion. Good car design is integral to the cachet of each of our brands, particularly where it brings the brand's tradition into the modern age. We have thus transformed the traditional luxury of Mercedes-Benz into a modern luxury, reinterpreted the brand with the star and also made it fascinating, tangible and, above all, desirable for young customers.

**What role does customer feedback play in your work?**

We listen carefully to what our customers say about our brands and products. Today's customers want design products to mainly underline their own personality and to showcase their own lifestyle. The object, therefore, is to accentuate one's own individuality as well as to reward oneself and indulge in something special. One of the key tasks for my design team is to arouse this desire in customers and to satisfy it with our products. We want everyone to feel attracted by the emotional effect of our products, because design engenders desirability before the customer learns about innovations or technology. To this end, we create an integrated experience for the customer.

## **Ultimately, how much design must there be for the customer?**

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For us, design is above all the visual and haptic manifestation of the brands and their values. Design is, as it were, an expression of a brand's soul, our inspirations and the feedback from our customers. The goal of our work is to create a consistent, recognisable identity and a distinct brand world – wherever customers and the public come across our company, its brands and products – be it in their vehicle, at a retailer or online. So design is correct and important wherever it helps customers to experience our brands. Here, we are cooperating closely with our colleagues in marketing and communications and investing lots of time and effort in this task.

## **In what direction is your design philosophy now developing?**

Our work centres on luxury. For us, it is less a question of material values and more about an authentic, emotional experience and a supreme aesthetic. We have therefore defined a distinct brand aesthetic for Mercedes-Benz and each of its sub-brands, derived from our design philosophy. We aim to create for our customers an integrated experience spanning the brand, the product and the digital world. Design showcases the brands, shaping the brand experience with desirable products and creating links between the real and digital worlds that are intuitively accessible to the customer.

## **How do you create this brand aesthetic?**

To make complex things simple, you first need multi-layered thought processes and ways of working, which are then reduced to simple messages and impressions. And, of course, a highly motivated and well-trained team that sees things from the customer's perspective. In a dialogue with our marketing colleagues, we have analysed the DNA of each of the brands: Where is the brand coming from? What are its defining attributes? What design features are characteristic? What do customers value about it? On this basis, we have defined an unmistakable aesthetic for each of our brands. In this way, we create integrated experiences spanning the brand, the product and the digital world. Thus, Mercedes-Benz stands for a modern luxury, and Mercedes-Maybach for the ultimate in luxury. Mercedes-AMG impresses with performance luxury, while EQ points the way to the future with progressive luxury.

## **What do you see as the greatest challenges for the car design of tomorrow?**

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The digital transformation in particular presents new challenges also for us designers. The new A-Class is a good example. It is the first model from Mercedes-Benz to feature the all-new MBUX multimedia system (Mercedes-Benz User Experience). With the new MBUX generation, we are transferring our user interface design to the digital world. We are thus translating intelligent technology into an emotional overall experience. A unique feature of this system is its ability to learn thanks to artificial intelligence. MBUX can be individualised, is controlled using natural language and adapts to the user. It thus creates an emotional link between vehicle, driver and passengers. With MBUX we have simplified complex operating and control processes to enable people to communicate with the system intuitively and without the need for a learning phase. Design functions here as a translator.

## **What do you see emerging as the dominant trend in the near future?**

The interior of every automobile will become hugely more important in future, evolving into the "third place", alongside the "home" and the "office". Once again, the A-Class is the best example: we have created a unique new interior architecture, above all by means of an avant-garde design of the dashboard. For the first time, a cowl above the cockpit has been totally dispensed with. This gives rise to a unique, unprecedented feeling of space that exudes a feel-good atmosphere and enchants the occupants. The A-Class embodies what we call Interior 2.0.

## Mercedes-AMG: design and brand



Inspiration on all levels: This is how the brand aesthetics of Mercedes-AMG would look transferred to an imaginary living space. For inspiration, the designers keep creating new idealistic design worlds.

### **The brand aesthetic**

The brand aesthetic of Performance Luxury that has been defined for Mercedes-AMG aims to tease out the aesthetic aspects inherent in the powerful appeal of the AMG brand. The ambience that the brand aims to exude is initially characterised in terms of colour. A glowing, pulsating red, positioned to accentuate it against a dark backdrop, symbolises power, passion and performance. The materials used are distinguished by their authenticity and very consciously establish a link to the high-technology world of motor racing. The use of contrasts, too, such as smooth – rough, soft – hard, shiny – matt, serves to emphasise the performance aspirations of AMG. New highlights are set by the use of more refined materials revealing, for example, a marble-like structure, thereby conveying a powerful interpretation of the concept of luxury. Dynamic graphics, shapes and their proportions create a sense of speed and underscore the muscular beauty of the brand aesthetic.

### **Exterior design: broad radiator grille, dominant air intakes**

The exterior design, too, reflects the brand aesthetic of Performance Luxury. The design elements are not there just as ornamentation, but have an underlying technical purpose that is apparent in the way they look, with a total focus on the brand value of performance.

## **AMG-specific grille and front apron**

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The AMG-specific radiator grille stems from the world of motorsport and was first seen in a standard-production vehicle in the AMG GT R. It comprises 15 vertical chrome struts, taking its design cues from the AMG GT3 racing car. Its basic form harks back to the Mercedes-Benz 300 SL racing car that won the legendary Panamericana road race in Mexico in 1952. The front apron in jet-wing design emphasises the cars' width, making them appear to sit even flatter on the road. The air intakes, with their dominant design, ensure the provision of adequate cooling air to the drive system and are an expression of pure, unadulterated power.

## **Spoiler and tailpipes**

Rear spoilers, whether extendable or fixed, serve not only to emphasise the family affiliation, but play an important part in active aerodynamics. The rear end is characterised by the louvres in the air intakes and the distinctive rear diffuser, while seen from the side, the hallmark side skirts strike the eye.

## **A little chrome, more carbon fibre**

Carbon-fibre trim is used to underline the progressive sportiness of the brand. Depending on the model, the front splitter, the fins in the wings, the exterior mirror housings and the rear apron can be trimmed with carbon fibre, if so required. There is also a practical reason for the use of carbon fibre, as it weighs less than conventional materials and thus enhances the agility of the vehicles.

## **Interior design: dynamically sloping centre console, sculptural instrument panel**

The interior design echoes the design idiom of the exterior. Particularly striking: the interior of AMG vehicles is extremely sculptural in style and more oriented towards the driver than is the case with other brands sporting the three-pointed star.

The convex curve of the high centre console in a stylised V8 design not only underlines the performance aspirations of the brand, but also fulfils very practical purposes. Thanks to the dynamically rising slope of the centre console, the high beltlines, the concave door panelling, the wrap-around and the low seating position, the driver is integrated into the cockpit and feels fully attuned to the AMG vehicle.

## **Instrument panel emphasises breadth**

The sharp slope of the instrument panel makes for an exciting interplay with the dominant feature of the centre console. By emphasising the car's width, it gives the impression of a powerful, outspread wing.

## **Sporty seats convey motorsport feeling**

AMG Performance seats connect the driver with his or her vehicle in a very special way. By virtue of special side bolsters on the seat surfaces and backrests, they offer the occupants even better lateral support, while lending the interior a distinctive, sporty character with their appearance – also thanks to the AMG badges and the attractive trim in the backrests.

## **UI/UX: race feeling in the cockpit**

The User Experience with AMG is also characterised by cutting-edge technology, efficiency and performance. Drivers have a whole range of race-specific functions at their fingertips:

- Warm-up: engine and transmission oil temperature plus charge pressure as Boost display.
- As well as the conventional speedometer and rev counter displays, drivers can call up engine data or current output and torque figures.

- A distinctive prompt to change up a gear when driving in manual mode, borrowed from Formula 1, is a further specific feature of AMG.
- Depending on model, it is also possible to see a visualisation of the workings of all-wheel drive system.
- Race Timer: manual stopwatch for lap times and colour display of fastest and slowest laps, plus average speed and distance.
- If the AMG TRACK PACE option is ordered, instead of "Race Timer" the instrument cluster shows the "AMG TRACK PACE" menu, with visualisations of race tracks, sector and lap times.
- There is also a specific AMG TRACK PACE view in the optional head-up display (HUD) with circuit graphic, bends, braking points, delta speed and absolute times.

### **Mercedes-AMG GT 4-Door Coupé: beauty and power**

The most recent addition to the brand family, the Mercedes-AMG GT 4-Door Coupé, reveals its own special interpretation of the hallmark design features of the brand and represents the pinnacle of sporty motoring. It follows the design tradition of the successful AMG GT models and then takes this to the next level. The powerful body exudes dynamism and motivation. Sensuous shapes with convex surfaces lend the four-door AMG GT timeless elegance, while the flowing silhouette with the sleek greenhouse flags up its sporting credentials. Slim Multibeam LED headlamps, the AMG-specific radiator grille, the Shark Nose and the front apron with its enhanced Jet Wing (with flowing A-Wing on the six-cylinder model) also lend the vehicle the typical presence of the AMG GT family.

With frameless side windows and a flat windscreen inclined far to the rear, features of the classic coupé architecture are also cited. With the additional seat row in the rear the characteristic lines of the AMG GT models are not compromised. The tailored cut of the upper contours and the broad shoulders point to the athletic, sporty orientation of the vehicle, which is additionally emphasised by very pronounced rear wheel arches.

The rear view of the new 4-door coupé picks up on familiar features of the AMG GT design idiom: extremely slim LED tail lights define the hallmark boot sill line, the rear aerofoil extendable in several stages not only underscores the family affiliation; it is also an important element of the active aerodynamics. Page 9

The two eight-cylinder models can be identified through the three horizontal louvres in the side air intakes at the front, the Jet Wing with its trim element in Silver Shadow, the distinctive diffuser at the rear and the two-pipe exhaust system with trapezoidal tailpipe trims. The six-cylinder variant, meanwhile, has one louvre in each of the air inlet grilles, round twin tailpipe trims and a somewhat less pronounced rear diffuser.

## **How AMG makes sportiness, passion and cutting-edge technology discernible**

Eva Wiese is Head of Marketing and Product Management at Mercedes-AMG GmbH. In an interview, she explains how it's possible to keep on developing the globally successful sports car and performance brand further.

### **Ms Wiese, AMG is now more than 50 years old. What does the Mercedes-AMG brand stand for today?**

There's a lot of racing spirit in AMG. After all, our roots are in motorsport. That's why the brand promise, "Driving Performance", is the focus for every AMG employee. It's our impetus and, at the same time, an attitude. We live out our claim of questioning the status quo and pushing back technological boundaries. We want to give our customers intensive driving and brand experiences that they won't forget. That works best when we focus on our core strengths: perfect craftsmanship, cutting-edge technology and a passion for dynamic, emotional products.

### **How do you enable your customers to experience this?**

Our vehicles are the strongest argument with the greatest power of persuasion. Anyone who's ever driven a Mercedes-AMG knows what I'm talking about. But beyond technology there's something else that makes a Mercedes-AMG - its completely individual, distinctive character.

It's not just behind the steering wheel that our customers experience the promise of "Driving Performance". Our aim is to make AMG's typical superiority, intensity and the special character of the brand evident to all the senses - whether it's at international motor sport events, at AMG Driving Academy events, in the AMG Private Lounge, in our AMG stand-alone stores or in the AMG Performance Centres. Over 500 of these centres in 40 countries invite customers and fans to immerse themselves in the Mercedes-AMG brand world and experience the brand directly.

## **And where is AMG's brand development heading?**

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Needless to say, we will carry on enhancing our brand profile in the future and continue successfully on our course. This also includes further expanding our portfolio for all performance-minded customers in the future - for example with hybrid performance drivetrains. We will also strike out in new directions in our branding work. Digitalisation plays an important role in this, but we are still focusing on analogue formats as well, something that our target audience appreciates.

## Mercedes-Maybach: design and brand



Inspiration on all levels: This is how the brand aesthetics of Mercedes-Maybach would look transferred to an imaginary living space. For inspiration, the designers keep creating new idealistic design worlds.

### Brand aesthetics

Mercedes-Maybach stands for ultimate luxury in its most cutting-edge guise. The brand's style is embodied in sublime beauty, supreme aesthetics and elegance. Something very special is showcased for one sublime moment. This is not about wallowing in the past, but about forward-looking enhancement and refinement. The atmosphere is warm, light and airy. This is also underscored by the use of light colours, which symbolise the luxury of room and space. Black elements forge a link with Mercedes-Benz and allow precious metals to add a sublime shine. The chosen materials feature a deliberate interplay of the familiar and the innovative, exclusively crafted throughout. Ultimate precision and a loving attention to detail are demonstrated by graphic elements which are derived from the brand logo.

### Exterior design: Pinstripe radiator grille, expressive wheel rims

The exterior conveys expressiveness and superior quality. Characteristic features include the radiator grille, the long wheelbase, a specific rim design and the use of chrome as design elements.

### **The Mercedes-Maybach radiator grille**

The chrome-plated radiator grille with its fine vertical bars defines the front view. The vertical bars become slightly thicker towards to the top. The design was inspired by an elegant pinstripe suit. The Maybach lettering places the brand in the spotlight. The radiator grille rests on two aerodynamically shaped supports on the outer right and left of the bumper.

### **Long wheelbase, expressive rim design**

The extremely long wheelbase of the Mercedes-Maybach models enables a luxuriously spacious passenger compartment which benefits the rear passengers in particular. The Mercedes-Maybach S-Class outstretches the flagship of the Mercedes-Benz model range – the long-wheelbase S-Class Saloon – by 20 centimetres. The exterior appearance is rounded off by expressive 20-inch wheels in multi-spoke or 20-hole design.

### **Striking chrome highlights**

The choice of materials demonstrates the sublime beauty and perfection which are hallmarks of the brand. Chrome highlights feature above all in the bottom air intakes of the bumpers. The chrome-plated window frame is additionally emphasized by the chromed B-pillar. The C-pillars on either side sport the traditional Mercedes-Maybach logo in the form of a double-M in a curved triangle. Maybach lettering additionally adorns the boot lid. The chrome applications deployed at the front are continued in the rear area, emphasising high quality and elegance.

### **Interior design: Spaciousness, supreme exclusivity**

The interior of Mercedes-Maybach vehicles offers a spacious and relaxing

setting boasting the ultimate in seating comfort and prestigious design with diverse scope for individualisation.

### **Spacious interior, particularly for rear passengers**

The long wheelbase of the Mercedes-Maybach vehicles offers crucial advantages for their passengers, who enjoy a maximum of space. This makes travelling in a Mercedes-Maybach a particularly prestigious experience and the pinnacle of comfort – with superlative legroom and maximum comfort when boarding and alighting.

### **Outstanding seating comfort**

The ultimate luxury experience derives in no small way from the First Class seats, which are exclusive to Mercedes-Maybach. The seats with their projecting calf supports in the rear of the Mercedes-Maybach S-Class offer special adjustment kinematics for added comfort, for example. The backrest is adjusted separately, which means that the legroom and seat reference point remain unchanged. The maximum backrest angle is 43.5 degrees. The most upright backrest position of 19 degrees allows relaxed working in the rear. The individual seats can be ventilated and heated separately from one another. Select materials and an exclusive leather trim package are also available.

### **Prestigious design with diverse scope for individualisation**

Mercedes-Maybach vehicles surround their passengers with specific architecture, fine materials and a clearly designed interior. Including hand-stitched door trims, appointments in exclusive highlight colours and diverse high-quality details such as copper-, gold- or platinum-coloured topstitching. Individualisation plays a major role here: five more exclusive equipment and design lines were added to the range of interior options for the Mercedes-Maybach S-Class in 2018, for example.

### **UI/UX: The ultimate in comfort**

The Vision Mercedes-Maybach Ultimate Luxury, which was shown at Auto China in Beijing, offers a special variation of the Mercedes-Maybach user experience. Characteristic features are the light and appealing colour spectrum

from white to rose gold, the sophisticated design and craftsmanship and special high-quality comfort items.

### **Rose gold and glass symbolise sublime beauty**

Contrasting light elements against a dark background characterise the user interface of the Vision Mercedes-Maybach Ultimate Luxury. The interplay of light and dark and the use of glass further reinforce the luxurious yet light overall impression. Colours such as rose gold and sensual patterns add contrasting highlights. In the hyper-analogue instruments the pointers move over a round, crystal-look display.

### **Blending the digital and analogue worlds**

Like a butler, the Vision Mercedes-Maybach Ultimate Luxury acts with anticipation, instead of offering long menus and lists. The digital and analogue worlds blend seamlessly into one. The vehicle plays music to match the current mood, knows the appointment calendar and plans the routes accordingly. In the rear, various flavours of tea and relaxation programmes are on offer, depending on who the rear passenger is. This is a luxury feature that can also be found in the user interface.

### **Vision Mercedes-Maybach Ultimate Luxury: Crossover of high-end saloon and SUV**

The Vision Mercedes-Maybach Ultimate Luxury represents the brand's design values in a fascinating way, and offers a new interpretation of ultimate luxury. The show car combines the comfort of a high-end saloon with the strengths of an SUV. These include the raised seating position and the athletic looks.

Smooth, dynamic surfaces with no beads or sharp edges conjure up a picture of sporty elegance. With its balanced proportions, the vehicle has tremendous presence. In combination with the low-profile front headlamps with three lamp units, the Mercedes-Maybach-specific grille dominates the front view of the vehicle while emphasising its brand affiliation. The large air inlets along with the horizontal air inlet with integral chrome blades underline the sportiness of

the SUV saloon while lending it a dynamic look. The air inlets are crossed by the brand's typical honeycomb pattern.

The upright C-pillar, long, gently forward-sloping bonnet and compact notchback dominate the sportily elegant side view. At the rear end, the three-part lamps are reminiscent of the design of the front headlamps. Situated above them is the visually vertically split rear window. Another striking feature is the modelled underdrive guard with diffuser look, which also incorporates the front-end Maybach pattern.

The interior of the Vision Mercedes-Maybach Ultimate Luxury features an exciting contrast between high-level sportiness and luxurious spaciousness. Exclusive materials with high-grade highlights exude exquisite quality in the interior. Exclusivity and quality are underscored by the use of colours such as rose gold, crystal white and pearl grey. Flowing forms, delicate fabrics and aluminium parts create a contrast between the sportily elegant details of an SUV and the lightness of a saloon.

Wave-like, flowing lines of light are integrated flush into the wood surfaces, blending the analogue and digital worlds. The tailored seat upholstery layouts take up the lines of the trim while giving a reinterpretation to the typical diamond shape. The fine perforations are in rosé gold.

The wide centre console extends through to the rear. It is equipped with an integral, heated tray with teapot and cups, allowing exquisite tea-drinking enjoyment while on the road.

### **Exclusive furniture collection of timeless aesthetic appeal**

The designers have evolved a furniture collection to match the Vision Mercedes-Maybach Ultimate Luxury. It comprises two pieces of lounge furniture, a two- and a three-seater sofa. A coffee table and an occasional table also feature. Inviting lounge chairs on which to relax complete the ensemble alongside planters and coordinating lamps.

All the pieces of furniture follow the same design idiom. With their distinctive shape, the clear silhouette and the attractive surface they convey the design philosophy of Sensual Purity to non-automotive objects. The star of the collection is the sofa, which has been designed as a two- and three-seater variant. The pristine crystal white leather cushion has a high-gloss polished rose gold metal frame. Metal and leather are strictly, precisely separated from one another by painstaking attention to detail.

All the pieces of furniture sport the same mixture of materials and are radiant in white leather and in electroplated rosé gold metal. Contrasts of colours and materials come courtesy of the glove-soft white nappa leather which is also predominant in the interior of the show car and stands for abundance, plus the fine metal sheen of the rosé gold on the backs of the furniture, symbolising high tech.

## **How Mercedes-Maybach became a modern myth**

**Mr Hülder, as head of Product Management, your remit includes the S-Class, which is often described as the "best car in the world" and which provides the basis for the Mercedes-Maybach S-Class. What wishes do customers attach to a Mercedes-Maybach?**

Our customers are successful people who seek something special and find it in our company. They have high expectations in terms of exclusivity and individuality, but also with regard to technology. With Mercedes-Maybach we are able to accommodate these wishes at the exclusive high end of the market.

**Maybach used to be associated with inventive brilliance and splendid luxury. What does the brand stand for today?**

Mercedes-Maybach continues to stand for the ultimate in luxury and combines the perfection of the Mercedes-Benz models with the exclusivity of Maybach. Mercedes-Maybach is more than just appointments and equipment. Under this sub-brand we offer vehicles with their own distinct character and highly exclusive features specific to Mercedes-Maybach. These include the brand's signature radiator grille, for example.

Mercedes-Maybach models are conceived as artistic flagships which offer a sublime experience. Take the Vision Mercedes-Maybach Ultimate Luxury. This vehicle exemplifies the hallmark Mercedes-Maybach values of traditional craftsmanship and uniqueness.

**How have you managed to transport the legend into the modern era?**

Through supreme exclusivity, technological refinement and optimum individualisation. Nine different, perfectly-matched variations are available for the two-tone exterior paintwork of the Mercedes-Benz S-Class, for example. We offer exclusive combinations of the finest materials and colours on the inside, too.

Then there is the innovative headlamp technology DIGITAL LIGHT, which is in small-series production for the Mercedes-Maybach S-Class.

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In its heyday, the venerable Maybach-Motorenbau GmbH company built only a small number of automobiles, but these belonged to the elite of German and international car-making. We aim to uphold and reinterpret Maybach's exclusivity. To this end we will be continuing the series of legendary Maybach automobiles in the future, the Vision Mercedes-Maybach Ultimate Luxury being the most recent example.

**Does that mean everything has to be ultra-modern and digital?**

We combine tradition with cutting-edge technology. Ever since Mercedes-Benz invented the car 130 years ago, driving has been a source of enjoyment and delight. Growing digitisation additionally gives rise to a need for solutions of lasting value. Mercedes-Maybach is predestined to perform this balancing act between the traditional and the forward-looking in a convincing, authentic, approachable and highly successful manner.

## Mercedes-Benz: design and brand



Inspiration on all levels: This is how the brand aesthetics of Mercedes-Benz would look transferred to an imaginary living space. For inspiration, the designers keep creating new idealistic design worlds.

### **The brand aesthetic**

The aesthetic of modern luxury is characterised by timeless beauty, a combination of high-grade technology and craftsmanship as well as a reduction to what is really important. The aim is to spark a desire for the brand. The atmosphere created by the design conveys a reduced, but not distant appearance that is modern and timeless. Black and silver are the dominant colours that create a stage for highlights, but also stage innovations to be complemented by a warm colour range. Natural materials, such as leather and wood give a feeling of being approachable and can be harmoniously combined with technical and innovative highlights. Modern graphic elements that quote the typical Mercedes style idioms or pick up on the brand make the brand identity stronger.

### **Exterior design: sporty, dynamic, emotional**

Characteristic exterior design elements of Mercedes-Benz vehicles include the striking radiator grilles, dynamic side lines and sensually traversing surfaces that largely do away with creases.

## **Striking radiator grille**

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Regardless of the variant: Mercedes-Benz vehicles' radiator grilles always embody noblesse, confidence, and timeless aesthetic. They dominate the progressive front design featuring a deep-drawn, stretched bonnet. Only Mercedes-Benz offers brand and target group-specific variants of the radiator grille for its products, for instance with centrally positioned star (Avantgarde variant for Mercedes-Benz) and the star standing upright on the body (Exclusive exterior).

## **Calm, dynamic side lines**

The vehicle is visually extended by the longer wheelbase and individual, lateral dropping lines run along the side. The cab has been slightly offset towards the rear, hence creating an ample prestige dimension. The prestige dimension states the distance between A-pillar and front axle. The greater the prestige dimension, the longer and more impressive the bonnet looks. This contributes to the unique Mercedes-Benz proportions that have been convincing and sparking a passion in generations of onlookers.

## **Reduced lines, sensual surfaces**

Mercedes-Benz stages sophisticated technology and sparks emotions with clear shapes and sensual surfaces. The extreme reduction of creases and lines emphasises the elegant vehicle body and structures it with light and shade. Mercedes-Benz design thus creates unexpected shapes while being emotional and fascinating.

## **Interior design: new ways**

A modern interpretation of luxury calls for emotional, authentic experiences. With this in mind, the bipolarity of traditional craftsmanship and sophisticated technology also forms the focus of interior design at Mercedes-Benz. The vehicles exude Sensual Purity, setting standards in precision and quality with an extraordinarily high-grade finish. With the interior of the new A-Class and

the next GLE, Mercedes-Benz is consistently carrying on as intended to completely restructure the interior.

### **Avantgarde instrument panel**

The unique architecture of the interior is particularly marked by the avantgarde design of the instrument panel. For the first time in the A-Class a traditional cowl above the cockpit has been completely dispensed with. As a result, the wing-shaped main body of the instrument panel extends from one front door to the other without visual discontinuity.

### **Floating widescreen display**

The instrument panel of the A-Class has been clearly structured into two three-dimensional, horizontal sections: the lower section is visually separated from the main body of the instrument cluster by a "trench", and it appears to float in front of the instrument cluster. The optional ambient lighting enhances this effect, accentuating the free-floating impression of the substructure. The lower section of the instrument panel simultaneously provides the basis for the turbine-look air vents and the completely free-standing widescreen display in front of the driver's seat. The new GLE will also feature a free-standing cockpit display that seems to be floating as well as a new, lightweight image and a sporty focus on the driver. This is emphasised by the lower body, with a deep-set wrap-around wooden trim with door panels, This generates an ample focus on the width of the vehicle and a feeling of space like in luxury class saloons to create an extraordinary feeling of elegance and safety.

### **New turbine look**

Thanks to the omission of a cockpit cowl, the main body of the instrument panel with its trim extends from one front door to the other behind the seemingly free-floating widescreen. The trim elements have been structured in so-called "wrap-around" design and the choice of materials (e.g. open-pore wood) underlines the progressive, modern positioning as the top interior in this class. The total of five, round air vents in the A-Class are given a new turbine look inspired by the world of aviation. Finely designed air vanes in a concentric

arrangement create the impression of a jet aircraft turbine. As part of one equipment line the vent surround is emphasised in colour at the rear of the vent geometry, giving the impression of an afterburner. The air vents in the centre are driver-oriented, accentuating the sportiness of the interior. In the new GLE, the central nozzles, also known as square nozzles, with their four-fold signature design familiar from the S-Class and E-Class, are staged in a striking, SUV style to emphasise their width. The interior has been designed with great attention to detail featuring ambient lighting like never before.

### **UI/UX: a new user experience**

Mercedes-Benz also launched a new infotainment system with the new A-Class. The name MBUX alone – Mercedes-Benz User Experience – indicates that the experience (UX: user experience) and benefits for occupants are in the focus. A unique feature of this system is its ability to learn thanks to artificial intelligence. MBUX can be individually configured to adapt to the corresponding user. Brilliant graphics and a clear, very structured design intuitively create a link between vehicle and driver. In terms of design, the colour theme, free-floating spatial design of screens and the options for different degrees of detail strike the eye.

### **New interpretation of the traditional, black colour theme**

The Mercedes-Benz world works with black backgrounds. They form a space like on a stage which not only sets standards visually, but also supports navigation between the individual information levels. Blue creates a modern, digital look. Materials, such as glass and chrome are in the focus and support a technical look.

### **Free spatial design of screens**

The most important information (such as arrival time, song currently being played, etc.) is displayed on the home screen, alongside the freely selectable main applications (e.g. telephone, navigation and radio). However, not as lists, but using intuitively operated, brilliant 3D graphics in maximum resolution. These so-called main icons have been positioned freely within the space and

they are made tangible by images. Emotional staging underlines the simple understanding of the operating structure. Operation is horizontal and makes optimum use of the ten-inch media display's widescreen format. Graphics are calculated and illustrated in maximum resolution and real time.

### **Concentrating on what is important**

Luxury also means being able to concentrate on what is important. For this reason, drivers can select Silent Mode in MBUX. In this mode, the system exclusively shows information that is directly required for driving as part of a clear, transparent interface. Concentrating on what is really important to users in this moment, that is the essence of digital luxury. Digital luxury means making it as easy as possible for drivers and linking the digital with the analogue world. The vehicle knows what the driver needs and always supplies the information required, such as warnings about the traffic situation. This user interface is only made possible by the vehicle's digital intelligence. Anyone seeking more information can add more detail and data to round off the driving experience.

### **The new A-Class: the perfect balance of beauty and intelligence**

The design philosophy of Sensual Purity, defined by the six guidelines of the design code, applies to all Mercedes-Benz designers. This unique design philosophy is interpreted and developed accordingly, ensuring that each model series acquires its own distinct character while nevertheless always remaining recognisably Mercedes-Benz.

Mercedes-Benz stages sophisticated technology and triggers emotions as well as desires thanks to the clear shapes and sensual surfaces of the A-Class. The exterior of the A-Class represents sportiness, dynamism and emotion. The progressive front design with a low bonnet, slim LED headlamps (optional) with chrome elements and daytime running lamps guarantees a confident appearance. The striking radiator grille reinterprets its shape. Its outline opens up towards the bottom and also features pins with a diamond look as well as a silver, central louvre.

The larger wheels underline the sporty character of the new A-Class and make for a powerful appearance on the road. The vehicle has a wider look at the rear end thanks to a more heavily waisted greenhouse which also emphasises the shoulders, and to the wider-spaced rear reflectors in the modular, two-section rear bumper. The slim tail lamps are in two sections. The laterally attached spoiler on the rear window improves aerodynamics.

The emotional stage is also set thanks to the versatility of 64 colours for ambient lighting: the different colours are composed into ten colour themes to allow an avant-garde lighting display with spectacular colour changes.

For instance, this avant-garde ambient lighting becomes apparent in the area where the upper and lower sections of the instrument panel merge. Thanks to a combination of indirect and direct lighting, a very special ambience is created here that could be compared to the night-time illumination of a historic building. The interior of the turbine-like air vents with galvanised surfaces is likewise emotively presented by the ambient lighting.

### **The new GLE: Sporting elegance and safety**

The interior of the new GLE combines the luxurious elegance of the Mercedes-Benz interior with the formal language of a progressively designed SUV interior. The central element in the dashboard's design is a sporty cockpit embedded in a high-performance body. The freestanding cockpit display floats, for the first time without a cover, in a cassette with built-in air nozzles for a sporty accent. This is emphasised by the lower body, with a deep-set wrap-around wooden trim with door panels, This generates an ample focus on the width of the vehicle and a feeling of space like in luxury class sedans to create an extraordinary feeling of elegance and safety. The high centre console stands in slick contrast to the architecture of the dashboard. The two dominant handles, the highlight of the centre console, symbolise the playful aspect of the off-road experience.

The electronic instrument cluster offers impressively intuitive operation with three directly selectable zones. Showcasing elements in an emotively appealing manner underlines the comprehensibility of the control structure and impresses with brilliant pixel-perfect graphics.

## **How Mercedes-Benz delivers on its promise "The best or nothing"**

**Mr Stegmann, as Director Brand & Marketing Strategy you are responsible for the Mercedes-Benz brand. How can you continue developing the brand strategy in times of digital transformation and radical change at Daimler without losing sight of the brand's core?**

"Every brand has its own unique signature, its own DNA. This DNA is all-pervasive and apparent everywhere: from the product and the people through to marketing. The brand is at the core of everything we do. As the soul of the company, it is reflected in the brand's personality, in the brand's style, in the way we act and communicate.

The Mercedes-Benz brand has a long tradition of reconciling the apparent opposites of heart and mind in a fascinating manner. We seek to warm hearts while convincing minds. Our approach combines tradition with a spirit that embraces the future. It embodies the modern zeitgeist in supreme fashion and is very much of the moment. That's the Mercedes-Benz style. We at Mercedes-Benz dub this "Modern Luxury". This distinguishes us from the other car brands and sets us apart in the eyes of the customer. A good example here is our new A-Class. It sets a new benchmark for luxury in the compact segment and presents a revolutionary interior design. At the same time, with MBUX it offers intelligent high technology and a whole range of functions which have been the reserve of the luxury class to date. It is young and dynamic and at the same time grown-up and comfortable like never before.

## **How difficult is it in your view to alter a brand?**

Brands can be carefully changed and developed - that's precisely my job. On the one hand, work on a brand is influenced by psychology and requires a deep understanding of the thought mechanisms that are triggered in people's minds. On the other hand, it also involves a pronounced craftsmanship factor. As a brand manager, by gently tweaking both of these factors you can develop and refine brand images in people's minds. Mercedes-Benz is a prime example here. There are few brands that have gone through such a radical process of change in such a brief space of time. From an essentially conservative brand to one that is modern and progressive in character, while always remaining true

to itself. It is precisely this delicate balancing act that our customers have come to appreciate.

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### **What does Mercedes-Benz stand for today?**

As a brand, we have always applied our engineering prowess to address people's needs, setting technological milestones along the way. Today we aim to pursue this same course more rigorously in the areas of marketing and communication, too. At Mercedes-Benz we call this "human-centred innovation". This will enable us to make Mercedes-Benz an even more desirable brand which will continue to set benchmarks in the mobility sector of the future.

Mercedes-Benz has long offered its existing and potential customers more than just premium vehicles. Comprehensive and diverse service, mobility, financial and insurance products and exciting lifestyle offerings and events broaden the product and brand experience into an all-embracing Mercedes world. The development of our product and service range continues to be ongoing, of course. Still driven by our claim "The best or nothing" after more than 130 years.

## **EQ: design and brand**



Inspiration on all levels: This is how the brand aesthetics of EQ would look transferred to an imaginary living space. For inspiration, the designers keep creating new idealistic design worlds.

### **The brand aesthetic**

The EQ brand gives an insight into the future and is shaped by an avant-garde, distinct aesthetic – Progressive Luxury. This arises from the combination of a previously unknown beauty, the conscious clash of digital and analogue elements as well as the seamless merging of intuitive and physical design. The atmosphere is technically cool while still promoting a sense of well-being through the synthesis of full, organic forms and a warm material environment with dark wood or wool. The addition of innovative materials and blue light accents communicates a mood of progressivity. The colour scheme, a combination of black, silver and white with accents in typically brilliant EQ blue characterises a future-oriented technology brand. Graphic elements creating an analogy with the digital world are aesthetically implemented to maintain an air of approachability.

### **Exterior design: more range thanks to sensually efficient body**

The dynamic exterior design with its new electric aesthetic underlines the focus on the powerful electric powertrain and is systematically configured for maximum all-electric range.

The exterior appears to be cast from a single mould, the joints are concealed, the windscreen appears to flow into the bonnet. On the Concept EQ, the handles in the doors are recessed or left out completely for reasons of aerodynamics. The rear diffuser is embellished by a fine, multi-part chrome strip. The air inlet grilles for cooling the major assemblies at the front end have also been reduced to the essential.

## **Two-tone contrasts**

The interplay between alubeam and black surfaces adds the perfect emphasis: the transition from the gleaming black bonnet across the windscreen to the dark-tinted panoramic roof creates the new electro-aesthetic and is at the same time an exciting contrast to the alubeam paintwork.

## **The digital grille**

The front of the Concept EQ has the appearance of a smooth, clean display with no discernible joints. The vehicle is then brought to life with the starting procedure. The daytime running lamps are activated, the grille is illuminated from behind. Now the vehicle is clearly recognisable as a Mercedes-Benz. The white-illuminated Mercedes star and all the light elements are integrated in this seamlessly glazed design element. The blue-illuminated surround gives a completely new interpretation of the characteristic Mercedes radiator grille.

## **Interior design: the digital experience in the real world**

It is not just the body of the models that adapts to the electric age visionary, progressive aesthetic. The cool aesthetic of the exterior also continues in the interior with the Mercedes-Benz hallmarks. In the elegantly technoid cockpit, the focus is on simple, touch-based and intuitive controls.

The interior is characterised by progressive luxury and combines emotionality with intelligence and user-friendliness. Apart from the characteristic Mercedes electric seat adjustment, which has been further developed as a brand icon with state-of-the-art technology, it does not need any of the conventional switches or buttons. Thanks to touch-sensitive control surfaces, the driver can scroll through the different menus and confirm their selection with a click.

## **Seamless design**

The centre console, too, does without mechanical control elements. Touch-sensitive surfaces instead of conventional door openers or window lifters continue the seamless design of the exterior in the interior. The result is a cool aura that is emotively appealing at the same time. This focus is mostly apparent in the design of the instrument panel, which is styled as a flat wing profile and structured on a volume. The asymmetrical design is perfectly tailored to the driver while being especially clean and light.

## **The car as a third place**

As with the EQ brand aesthetic, "electric blue" is dominating the interior. The interior is almost like a cocoon enveloping driver and passenger without constricting them. Instead, the ambience is airy and fresh. Digital and analogue worlds meld together. This creates an interior shaped by electric aesthetic and provides a sneak preview of the vehicle as a digital experience zone and "third place" alongside the home and workplace.

## **UI/UX: merging of the analogue and digital worlds**

The customer experience of EQ, too, comes with a contemporary electric aesthetic. The driver can have specific information, such as on the charging process, displayed in the blue-and-white look. The digital and analogue worlds combine for an intuitively controllable interface.

## **Electric blue**

The attractive user interface design stems from both the state-of-the-art technology and the futuristic colour scheme comprising electric blue and white. Depending on the drive program, the colour scheme changes when accelerating during energy recovery. This facilitates fast and intuitive recognition.

### **Digital content, analogue features**

The world of progressive luxury offers full integration of digital content into analogue elements. In an increasingly digital world, this satisfies the need for analogue solutions with an excellent value retention.

### **Globally connected**

All mobile devices are seamlessly integrated into the digital environment system-wide. Thanks to Car-to-X technology, the driver is globally connected and can exchange information with the infrastructure and other vehicles. It is also helpful for the driver to be informed about nearby recharging opportunities. The charge level and charging process are showcased in keeping with the EQ brand world. The high-detail display also includes an indication of the current energy consumption along the route.

### **Concept EQ: futuristic beauty**

The monolithic basic form of the EQ Concept unites the DNA of an SUV with the dynamic character of a coupé and a dash of shooting brake at the rear end. The squat, elongated greenhouse gives rise to muscular purist proportions.

Scarcely visible body panel joins, concealed windscreen wipers, cameras instead of exterior mirrors and an absence of conventional door handles emphasise the stretched, dynamic silhouette, lending the SUV a seamless appearance while reducing its air resistance.

An intentionally reduced side view, broad shoulders and large 21-inch light-alloy wheels make for a dynamic presence even before the vehicle moves off.

The peripheral light strip of the "Black Panel" is characteristic of the vehicle. Embedded in it are the white, powerful LED headlamps. Viewed from the side, the flowing E-line and beltline form a frame around the base of the mirror camera. The tail lamps take up the contour of the "Black Panel" and are surrounded by an LED optical fibre in electric blue, which changes to red when the vehicle is moving and acts as a reversing lamp.

In the cockpit, the focus is on customer-friendly, intuitive and touch-based controls. The OLED displays show appropriate icons and symbols in the respective menu. The 24-inch (53 x 11 cm) TFT high-definition widescreen display presents all the relevant information, such as speed, range, driving data or navigation and map details.

### **Sculpture "Aesthetics Progressive Luxury": clear design idiom**

With the sculpture "Aesthetics Progressive Luxury", the design team presents a sculptural homage to the streamlined racing car in which Rudolf Caracciola in 1938 set a globally valid world speed record on public roads: 432.7 km/h on the autobahn between Frankfurt am Main and Darmstadt over one kilometre with a flying start. The designers were inspired by the clear design idiom on the one side and the purist aesthetic on the other. In an internal competition, they had the task of designing a radically reduced vehicle that takes up the style of the 1930s while giving it a completely new and contemporary interpretation.

The stretched, extravagant streamlined corpus of the sculpture is pressed flat against the ground, the flared wheel arches giving a muscular impression in the body. While the surface at the front end sensually models the corpus of the vehicle, it begins to slowly segment and separate towards the rear as if the resulting surface segments were captured by an imaginary air stream and carried away. The thereby generated optical effect embodies dynamism and speed in a fascinating manner. The formal clarity of the sculpture with its purist main body reflects the seamless look of all EQ vehicles.

The "Aesthetics Progressive Luxury" sculpture is the latest in the Mercedes-Benz series of sculptures. The series comprises the sculptures "Aesthetics

No. 1" (2010), "Aesthetics No. 2", "Aesthetics 125" (both 2011), "Aesthetics S" (2012) and "Aesthetics A" (2017).

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## **How EQ makes electric mobility a customer experience**

**Wilko Stark is Head of Strategy at Daimler and Mercedes-Benz Cars & CASE. In this role he is responsible not only for product planning in the passenger car division, but also for the electrification road map.**

**Mr Stark, EQ is a young brand that stands not only for electric mobility at Mercedes-Benz. What is the vision behind the brand?**

The EQ product and technology brand stands for a comprehensive electric mobility ecosystem of products, services, technologies and innovations. The spectrum ranges from electric vehicles and wallboxes to charging services and charging infrastructure. The name EQ stands for "Electric Intelligence" and is derived from the Mercedes-Benz brand values of "Emotion and Intelligence". Our goal is clear: we want to make EQ a desirable electric brand in the car industry. In this context, excitement and fascination are just as important as the message about offering holistic solutions that provide maximum customer benefit with state-of-the-art technologies.

**How do you intend to achieve your goal?**

The broad-based move towards electrification in our product portfolio allows us to make the EQ product and technology brand increasingly tangible for our customers. This begins with the extensive electrification of our modern combustion engines as mild hybrids. We call this technology "EQ Boost". Another, very important element is our current plug-in hybrid initiative, the technology of which is called EQ Power at Mercedes-Benz and "EQ Power+" for our AMG models.

Already today, the concept cars "Concept EQ" and "Concept EQA" provide a concrete vision of entirely new vehicle generations with battery-electric powertrains. And the world premiere of the first model, an SUV called EQC, will take place before the end of this year. The EQC will be an absolute milestone in terms of power, sportiness, safety and utility value. The driving experience, too,

is sure to delight our customers. Added to this are innovative solutions in such areas as telematics, connectivity and charging. The EQC will usher in a new era of electric mobility at Mercedes-Benz.

Between now and 2022, we will be bringing out ten new models under the EQ brand. With these models as an addition to our portfolio, we wish to offer our customers the right mix between mostly electrified conventional powertrains and all-electric powertrains.

We are also going even further: with partners from the automotive and energy supply sectors, we are in the process of building a public fast charging infrastructure in Europe. Together with our partners, our goal is to drive forward the implementation of an ultra-fast high-power charging network for our customers with around 400 charging stations on major traffic arteries in Europe by 2020. This will enable our customers to quickly charge their electric vehicles as required on long journeys.

**Apart from the electrification of the powertrain, what big changes can customers expect in the next years?**

Each of the four CASE pillars – Connectivity, Autonomous driving, Shared & services and E-mobility - is already transforming the world of mobility for humans. The all-new Mercedes-Benz User Experience infotainment system (MBUX) is an example of this. Thanks to Artificial Intelligence, the system is capable of learning, can be individualised and adapts to the user. In this way, it creates an emotional and intuitive link between vehicle and driver.

But things will get much more interesting once we succeed in combining the four CASE pillars. This combination will make it possible to develop entirely new offers for customers and thus to make mobility as intuitive as possible. The combination of connectivity, autonomous driving, sharing and electric powertrains will result in a self-driving electric taxi that can be requested without a driver by using your smartphone. It may still sound like a far-off vision, but we will make it a reality in the not too distant future.

## **Showcasing a passion for automobiles**

Mercedes-Benz design serves to showcase a passion for automobiles in a modern design idiom. The designers focus on the Mercedes-Benz design philosophy of Sensual Purity as an expression of modern luxury. This encapsulates a key aspect of the Mercedes-Benz brand – the bipolarity of intelligence and emotion. The aim is to create clear contours and smooth surfaces that showcase hi-tech while radiating emotional appeal. For the designers, good design must be hot and cool. Every Mercedes combines these two opposites.

It is important to the designers to render this bipolarity of the Mercedes-Benz brand tangible in the vehicles. Each model series has its own distinctive character, depending on the central attributes of its design. A Mercedes-Benz is nevertheless always recognisable as such. Because in addition to incorporating new stylistic developments, the designers draw from a "gene pool" of stylistic elements which are innate to the brand, thereby keeping long-standing traditions alive.

The design philosophy is defined by the Design Code. This is based on six guidelines which are interpreted accordingly for each model. In this way it is ensured that each model series has its own distinct character.

## **The six guidelines of the Design Code**

### **Unexpected Moments**

The Mercedes-Benz designers create highly emotional experiences and positive surprises: a celebration of the unexpected, the unusual, the sublime. The designers conjure up "Unexpected Moments", fashioning icons and showcasing these in a sensual guise.

The aesthetic, creative approach to material properties, colour and form reflects the bipolarity of the Mercedes-Benz brand. Emotion and intelligence are the poles between which the designers consciously seek the "harmony of contrasts" and create stimulating contrasts.

## **Stunning Proportions**

Good design is based on impressive proportions which express power, harmony and coherence. "Stunning Proportions" are a key focus of the work carried out by the Mercedes-Benz designers.

## **Freeform & Geometry**

"Freeform & Geometry" defines a sculptural, three-dimensional approach to designing surfaces: Mercedes-Benz design is based on clear, tangible basic geometries which are perfected by sensual, sculptural freeforms.

## **Significant Graphics**

The Mercedes-Benz designers employ "Significant Graphics" to visualise precision, refinement and high-tech. These engage in a fascinating interplay with the sensual forms. In this way, adeptly designed, precise details add highlights to the vehicle's sensually sculptured body.

## **Natural Attraction**

Excitingly muscular forms suggestive of a natural physique together with natural allure, materials with an appealing touch and feel, colours and moods conjure up "Natural Attraction" and offer a sensual experience.

## From the initial idea to the finished car

Innovative drive and a loving attention to detail are hallmarks of every designer's work. The process of development from the initial idea to final approval of the finished model covers a period of years in which the design team jointly creates the final vehicle step by step. The team slowly transforms various, initially competing design studies into the next generation of a Mercedes-Benz vehicle. The design process is an integral part of the development process. The designers collaborate closely with research, development and production areas, coordinating and fine-tuning vehicle dimensions, material concepts and production processes, also ensuring producibility in the process.

### **The design process: step by step.**

**Drawing/rendering:** The design process always begins with an idea, which gives rise to a drawing. On a sketch pad or a computer screen, ideas which previously only existed in the designer's head become visible. The best and most promising sketches are chosen from the initial diverse offering.

**Package:** The essential basis for every design is the so-called "package" - the sum total of all geometrical specifications. On the basis of this package, the sketches are developed such that proportions, dimensions and lines produce a coherent whole.

**Virtual model:** In order to assess the actual three-dimensional effect, selected designs are produced as authentic detailed 1:4 clay models and as virtual data models. These virtual models are visualised using the Power Wall – a huge multimedia projection screen on which the designers can view and analyse their designs from various perspectives. The car can be envisioned in the correct size and features such as geometry, colour and texture can be altered at a click. While both clay models and data models have their own respective advantages, to this day the virtual world is no substitute for real models produced to scale.

**1:4 clay models:** Not everything can be simulated to perfection on a computer. At Mercedes-Benz, clay models of every variant of a new automobile are thus produced alongside virtual models in the subsequent course of the development process. Only then are the designers able to judge whether their designs also produce the desired effect in three dimensions.

**1:1 model:** All the details of the new model are hand-crafted to produce a deceptively real-looking model. All the characteristic features of the new car become apparent. Optical measuring tools and milling machines are applied to produce the first full-scale prototype.

**Model selection:** The most promising options are chosen from numerous variants and modelled on a scale of 1:1.

**Interior sketches:** The first step in the interior design process also involves producing drawings and renderings. The various equipment packages or lines are created here – the interior in which the future driver is to feel at home.

**Interior clay model:** The development of the design is best revealed to the designer on the 1:1 clay model, which is created from the inside out, as it were. All the details are modelled until an aesthetically accomplished sense of space is achieved. Several alternative interiors are modelled as a rule, in order to decide which concept is to be pursued.

**Colour & trim/control and user interface concepts:** Materials and colours are chosen for the interior. The trim lines for the future automobile are defined from hundreds of fabric and leather samples and colours. All control and display elements and telematics interfaces are designed and coordinated to produce a fully integrated interior with a seamless appearance.

**User experience:** Digital innovations appear in extremely rapid and short development cycles. They therefore require great agility, and new ways of thinking and working. Development of the user experience is based on a three-stage thought process: together with UX engineers, UX designers first sketch out the form of interaction between man and machine. The aim is to create a simple, intuitively understandable and at the same time emotional user

experience. In a separate design phase, the designers create the fundamental aesthetic and stylistic variance. In this process, animated, three-dimensional objects in space create an intuitive and emotional experience. This blend of function and visual design is then programmed and realised in the implementation phase. During all phases, as an iterative process, the developed concept is tested, revised and retested with the help of numerous testers. For this purpose designers and engineers use static models, so-called seat boxes. Dynamic prototypes of the series production model are also used. These are used to examine whether operation is also easy and intuitive in real conditions, e.g. with changing lighting moods and noise backgrounds, and also different traffic situations.

**Equipment models:** All materials and colours are presented on an intricate 1:1 interior model in standard production geometry, enabling an all-embracing assessment of the interior with regard to geometry and surfaces.

**Final model:** The exterior and interior and their respective features are combined by hand to produce a deceptively real-looking final model. All the characteristic features of the new car become apparent. The exterior form of the future Mercedes-Benz model becomes tangible for all associated disciplines.

**Series production data:** In the last stage of the process, the final design model which has been approved by the management board is described in 3D data, the so-called "class A data". All the tools required to manufacture the vehicle can subsequently be produced by reference to these data. Great importance is attached here to precisely designed joints, harmonious surfaces and ideal mirror lines.

**Data control model:** In order to evaluate the class A data in a real-life scenario and to define the form in more precise terms, they are precision-cut on a data control model. The data are subsequently revised to take into account any modifications which prove to be necessary on aesthetic and technical grounds. In terms of surface quality, the resultant model essentially constitutes the first production vehicle and serves as the basis for series production.

## Key design terms

**Bauhaus:** A defining style in design, art and architecture which arose in response to expressionism at the beginning of the 20th century. Walter Gropius founded the Staatliches Bauhaus as a school of art in Weimar in 1919. The succinct character of Bauhaus and the manner in which it strips everything down to the essentials are also manifested in Mercedes-Benz design and represent poles of the design philosophy.

**Colour & trim:** Area of interior design. In addition to exterior paint finishes, the main focus here is on colours and appointments (e.g. trim) for the interior. For the surface finishing, the colour & trim designers choose materials and colours from hundreds of fabric, leather, wood and metal samples. The effects of the materials' touch and feel and the employed colours are configured and defined in realistic conditions in 1:1 interior mock-ups.

**Corporate design:** The visual appearance of a company and its brands, also as part of the corporate identity (CI). CD covers the entire scope of corporate communications, from the logo through stationery to internet sites, appearances at events and fairs, architecture, clothing, etc.

**Design freeze:** The final phase of the free design process, in which all the design specifications are finalised and technically feasible. The design process is "frozen" in this state and approved for the preparation of series production.

**Brand aesthetic:** Every brand has its own distinct aesthetic. This visualises the brand's values and positioning and renders the brand accessible on an emotional level. The aim is to strengthen the brand's identity and customers' identification with the brand, thereby raising its profile and engendering intellectual and emotional associations. The brand aesthetic is embodied first and foremost in the product, and can also be expressed by means of various identity-shaping attributes, including atmosphere, colour mood, materials, graphics and typeface, for example.

**Model approval:** Each design process concludes with approval of the model by the Board of Management. Following this approval, the new Mercedes-Benz is released for production.

**Moodboard:** This work-aid and presentation tool consists of a collage of photographs, drawings and concise captions. Moodboards help to inspire creative processes by visualising ideas and conveying atmosphere.

**Stitched facing:** Leather or artificial leather covering for the dashboard or other interior components, consisting of various pieces which are stitched together by hand.

**Power Wall:** The projection screen on which the designers are able to view and analyse their designs or data models on a scale of 1:1 from various perspectives and in various settings.

**Rapid prototyping** (fast model making): Generic term for various production processes whereby sample components and prototypes are produced particularly quickly by reference to CAD data. Methods applied here include stereolithography and 3D printing.

**Rendering:** A graphic representation which is produced from a sketch, a model or CAD data with the aid of computer technology or directly by electronic means.

**Creases:** Design feature. A recess which serves to define the character of surfaces. The role of creases is diminishing as the Mercedes-Benz design philosophy of Sensual Purity evolves.

**Interior mock-up:** A 1:1 scale model to represent the interior of an automobile. These mock-ups model the geometries and surface finishes inside the vehicle. Mock-ups serve to examine the ergonomics of the driver's area and to assess and select colour & trim variants, for example.

**Stereolithography:** A rapid prototyping method whereby high-precision plastic components are produced directly from the CAD data. Working with a liquid, light-sensitive plastic (photopolymer) the solid areas of the component are exposed to light from a laser beam, causing them to set.

**Spline data:** The spline of a vehicle is the mathematically perfect geometric representation of the visible interior and exterior surfaces, taking into account all technical and aesthetic design requirements. The spline data are approved by Design and forwarded via the Development units to the toolmaker's shop.

**UX design** (User Experience Design): A specialised area of design dedicated to fashioning an overall user experience. UI design is a sub-area of UX design.

**UI design** (User Interface Design): Design field focusing on the interaction between man and machine, that is, control panels and interfaces.

**Virtual reality:** 'Virtual reality' refers to an all-embracing computer-generated simulation of reality, which is usually brought tangibly to life by means of special data eyeglasses. The Mercedes-Benz design team uses this technology to visualise diverse concepts relating to all aspects of the car development and design process and to bring these concepts to life in interactive form.

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