

Auto Shanghai 2019

ID. ROOMZZ<sup>1</sup> – world première

Please note: You can find this press release, picture motives and films for the ID. ROOMZZ online at www.volkswagen-newsroom.com



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### World première

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In brief

# World première of the spacious ID. ROOMZZ in Shanghai: zero-emission SUV will be launched in 2021

### The facts - ROOMZZ in key points

- Zero-emission SUV: With three rows of seats, the series version of the ID. ROOMZZ is a spacious SUV that will be released around the world in 2021.
- The family is growing: ID. ROOMZZ<sup>1</sup> is the sixth model in the ID. Family after ID.<sup>1</sup>, ID. CROZZ<sup>1</sup>, ID. BUZZ<sup>1</sup>, ID. VIZZION<sup>1</sup> and ID. BUGGY1.
- SUV design for e-mobility: ID. ROOMZZ combines the effortless charisma of an SUV with smart Volkswagen e-mobility design.
- Combining the IQ.DRIVE systems: In "ID. Pilot" mode, the Volkswagen concept vehicle can be driven autonomously without an active driver.
- Open Space: Plenty of space inside allows for completely new seating configurations, turning the SUV into a lounge on wheels for a life on the road.
- Floating instruments: Digital, glass-front panel with dashboard and steering wheel 'floats' in front of the driver as a visual display.
- "ID. Light": Interactive light zones provide passengers with information via intuitively perceptible lighting effects.
- **4MOTION** in electric: Two electric motors can continuously drive both axles with a system output of 225 kW.
- Great agility: ID. ROOMZZ can accelerate to 100 km/h in 6.6 seconds and reach speeds of up to 180 km/h (regulated).
- Impressive range: An 82-kWh battery allows for ranges of up to 450 km (WLTP) or 475 km (NEFZ, China), respectively.

#### ID. ROOMZZ – new E-SUV for family and business

Wolfsburg / Shanghai, April 2019. Volkswagen is expanding its electric ID. product range with a multi-variable all-round model: the new ID. ROOMZZ. A zero-emission SUV in the five metre category. Following the more compact ID. CROZZ, Volkswagen introduced the second concept SUV in a completely new generation of electric vehicles. The series version of the ID. ROOMZZ, which is

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equally suitable for families and business use, is scheduled to take to the road from 2021. Volkswagen will present the concept car as part of a world première at Auto Shanghai (18 to 26 April) in an homage to China, currently the largest market for zero-emission vehicles. The new SUV means Volkswagen is setting the pace for its e-mobility offensive, as part of which it is releasing the ID. family, a new range of progressive electric vehicles with the range of today's petrol-powered vehicles. Alongside the ID. ROOMZZ, the ID. CROZZ and the compact ID. (all set to have a market début in 2020), other members of this new electric vehicle family include the iconic ID. BUZZ van and the avant-garde saloon ID. VIZZION (both will make their market début in 2022). The Geneva International Motor Show in March was a chance for Volkswagen to unveil its new ID. BUGGY, an open beach cruiser that could be released as part of small series production with external partners. As is the case with all ID. models, the new ID. ROOMZZ is based on the innovative modular electric drive matrix (MEB).

Seamlessly refined design. The SUV's bodywork adopts the clear, homogeneous lines of the rest of the ID. family. At the same time, the team led by Volkswagen head designer Klaus Bischoff has given the ID. ROOMZZ all the personality it needs. Even better: The concept car breaks new ground in the large SUV segment thanks to its many practical details. The seamless transitions between individual bodywork parts and levels are an important, unique selling point; the precise, refined design results in perfect aerodynamics and provides a homogeneous, clear view of all areas. Klaus Bischoff: "This SUV is a monolith, appearing to be seamlessly machined from solid metal. The ID ROOMZZ. effortlessly moves around using the power of electricity - silently and without emissions." In addition, the design features an extremely powerful, stylish dynamic. The front and rear shoulders in the bodywork are particularly striking, as they are created by two notably muscular and precise sections above the wings.

**Drive and be driven.** The concept car is designed with a new interior and seating concept. Klaus Bischoff again: "The ID. ROOMZZ shows us what we can



expect from full-size electric SUVs in the future. The puristic look emphasises the clear function and the user experience is intuitive and natural." The vehicle interior also provides a new spectrum of variability and customisability, ensuring that both the seating options and the driving mode meet the personal requirements of the passengers and driver. Background: The ID. ROOMZZ combines its IQ.DRIVE systems, enabling the concept car to navigate traffic all by itself (fully automated) as desired. Volkswagen is consolidating all assistance systems and technologies involved in autonomous driving under the umbrella brand IQ.DRIVE. It is simple to switch from the manual "ID. Drive" mode to the fully automated "ID. Pilot" mode: All the driver has to do is place their hand on the VW logo on the steering wheel for at least five seconds – from this moment on, the computer of the ID. ROOMZZ assumes control of the vehicle. The new "IQ. steering system" developed by Volkswagen engineers disconnects the steering column, moves the steering wheel to its off-position and thereby provides more space in the cockpit area. When the driver wants to reassume control, they again press on the VW logo. The steering wheel now moves out again and is synchronised with the position of the wheels. Important: Only when the driver touches the capacitive steering wheel, is the steering column reintegrated into the steering system – from this moment on, the driver must steer the vehicle themselves. In this way, maximum safety can be guaranteed when transferring vehicle control from person to machine and back again.

New configuration options. The fully automated mode (level 4) allows completely new configuration options for the integrated seats, which effectively turn the interior into a lounge. Overall, there are three different seating modes en route that correspond to the relevant driving mode. In the manual "ID. Drive" mode, the seats are covered with the new "AppleSkin<sup>TM</sup>" (artificial leather that contains 20 % vegetable matter), typically face forward while the backrests are up. If the driver switches to the fully automated "ID. Pilot" mode, each seats can be rotated inward 25 degrees to enable a more communicative lounge-like atmosphere on board. When driving is fully automated, the driver can activate "ID. Pilot Relax" mode, in which every passenger can tailor the



position of their seat to suit them – it can be moved from a standing to a reclined position in this mode. The series version of the ID. ROOMZZ will have up to seven seats.

Floating dash panel. The ROOMZZ is not fitted with a conventional dash panel. In the manual "ID. Drive" mode, the digital cockpit appears to hover in front of the driver along with the steering wheel. The digital cockpit consists of a full glass-front panel. The digitalised steering wheel is conceptually integrated into the panel. As well as sensitive touch-screen areas, it has a 5.8-inch display that shows relevant information such as navigation instructions in autonomous mode. There is also an AR head-up display, Due to Augmented Reality (AR), the head-up display projects navigation instructions in the virtual space in front of the ID. ROOMZZ, enabling the system to show pictograms such as an arrow sign in the visual field where the driver has to turn off. The new "ID. Light" is also integrated beneath the windscreen - this is an interactive light strip between the A-pillars through which the driver and guests obtain additional information. Information regarding the assistance systems, navigation, and air quality (CleanAir system) are displayed via the light effects in this LED strip. At the same time, corresponding information is provided via "ID. Light" in the doors and roof area to provide the front-seat passenger and passengers in the back with information.

225 kW system output and all-wheel drive. The ID. ROOMZZ is powered by two electric motors. The front coaxial drive generates 75 kW while the rear electric motor generates 150 kW. The combination of both motors results in a system output of 225 kW. The rear axle provides propulsion as standard. An "electric propshaft" distributes the power of the 4MOTION four-wheel drive between the front and rear axles within fractions of a second once this becomes necessary due to driving dynamics. In addition, the ID. ROOMZZ can be continuously driven in four-wheel drive mode. Both motors are supplied with energy by a lithium-ion battery in the vehicle floor. The battery has an energy content of 82 kWh. The ID. ROOMZZ can accelerate to 100 km/h in 6.6 seconds; the maximum speed is capped at 180 km/h. The range of the concept car in the



NEFZ cycle (China) is up to 475 kilometres, while in the European WLTP cycle the maximum range is 450 kilometres. The battery is charged via an inductive interface. Conventional charging via a plug is also possible.



#### **Key aspects**

#### Design and dimensions of a new all-rounder

Seamless perfection. The ID. ROOMZZ concept car is 4,930 mm in length. The wheelbase between the bumpers is 2,965 mm. The zero-emission vehicle is 1,903 mm wide and 1,675 mm in height. The concept SUV's exterior design adopts the clear, homogeneous lines of the rest of the ID. family; at the same time, the team led by Volkswagen head designer Klaus Bischoff has given the ID. ROOMZZ all the personality it needs to shine. Even better: the concept car breaks entirely new ground in the large SUV segment thanks to its many practi-cal details. The seamless transitions between individual bodywork parts and levels are just one unique selling point; the precise, refined design results in perfect aerodynamics and provides a homogeneous, clear view of all areas. There's a reason why the ID. ROOMZZ is painted in the new shade of Sunset Red. Background: In China, red is considered to be the colour of life and joy. Everything is decked out in red over Chinese New Year. Red is also a colour of warmth and power in China. When combined with gold, it symbolises wealth and luck, which is why the Sunset Red paintwork is enriched with traces of gold - the intense shade of red with its gold sparkle effect reflects the strong sym-bolism associated with these colours in China.

Silhouette with stylish shoulder section. The side panel is especially charismatic. A stylish touch is added in the form of the shoulder line with its unusually sharp undercut on the front and rear shoulder line as it transitions to the powerful, muscular wings. The wheel housings are home to 22-inch metal alloy wheels with 265 series tyres. The silhouette is also refined, with an aluminium roof line extending from the A pillar to the D pillar. An aluminium roof rail runs parallel to it. The wings of the exterior cameras (instead of exterior mirrors) and the illuminated touch strips for opening and closing the doors are visible only as narrow lines. An all-new, muscular SUV dynamic is created thanks to the seamless transitions, imposing shoulder areas and wings, retracted mid-section in the style of a sports car, and drawn-out proportions of the roof line, which are refined with aluminium elements.



A front end with the DNA of e-mobility. The ID. ROOMZZ radiates the fact that it is electrically driven. Instead of large air inlets, horizontally aligned LED elements along with clear, aerodynamically designed areas in the vehicle colour are dominant. Despite its impressive appearance, the design is welcoming and underlines the fact that the ID. ROOMZZ is very much compatible with the modern, urban environment due to its emission-free drive and interactive assistance systems. A formative aspect is the line that seamlessly moves from the window parapet to the bonnet, which provides the upper section of the front and the sharp undercut with its own distinctive structure and adds greater emphasis to its SUV character. Two LED clasps (daytime running lights) that emanate from the illuminated VW sign on the left and right-hand sides emphasise the width of the concept car. In essence, light becomes a design feature. The upper strip encloses the LED headlights from the outside – a new variation of the LED daytime running lights in the ID. and the ID. CROZZ, developed for a very large SUV. The middle section of the front characterises the bumper The front end, which features seamless transitions of individual elements, has optimised aerodynamics in order to minimise energy consumption.

LED welcome scenario. On opening the ID. ROOMZZ, the front and side LED elements – starting with the illuminated VW logo – are activated to welcome the occupants The centrally located LED crossbar and LED daytime running lights above and below the interactive "IQ.LIGHT – matrix LED headlights" start up one after the other. This is followed by the upper LED crossbar, whose light sequence encompasses the full headlights; the matrix LED headlights light up at the same time. The LEDs on the narrow touch strips in the side panel for opening the doors are also activated. The LEDs are extinguished in reverse order when the vehicle is parked. For reasons of comfort, the LED touch strips for the doors are the last to be deactivated.

Rear end with programmable rear light. As at the front, a circumferential line creates an unbroken line with the rear from the shoulder's sharp, precise undercut, which makes the ROOMZZ appear lower and emphasises its width. The rear also has an all-new light design which is unique even within the ID. family.



An LED strip with diamond cut-outs running across the rear displays all lighting functions. In stylistic terms, the diamonds represent a bridge to the front. As part of a lighting workshop in autumn 2018, Volkswagen announced a customisable tail light signature via app that will be available in the future. The ID. ROOMZZ is the German manufacturer's first concept car where the tail light signature can be customised via a smartphone app. This provides the owner of the ID. ROOMZZ with new, customisable LED graphic elements.

Rear window with brake light feature. The lighting of the future is smart. The ID. ROOMZZ demonstrates this well with its rear window, into which a light blind is integrated and acts as a third brake light. When braking slightly, only part of the blind "rolls up" from the bottom to the top. If the car brakes sharply, the brake light increases to encompass the entire rear window area. The warning effect is increased many times by the dynamic light.

#### Open Space as a lounge for tomorrow's travels

**Manual or automatic.** The ID. ROOMZZ is designed to have a new interior and seating concept. It provides a high degree of variability and customisability, ensuring that both the seating options and the driving mode meet the personal requirements of the passengers and driver. Background: The ID. ROOMZZ can, in contrast to the conventional manual mode ("ID Drive"), be fully automated ("ID. Pilot"). This allows for new seating configurations.

**Welcome aboard.** Four electric swing doors enable the passengers to enter the open space – a lounge on wheels for a life on the road. Thanks to their comfortable interiors, the ID. models of the future will – especially in "ID. Pilot" mode – be able to serve as a living space, making them more than just a mode of transport. At the heart of it all is the occupant, who can now make full use of their time – for communication, to relax, and to take care of any manner of business. Kinematics mean that the driver's and front seat passenger's door slide all the way forwards, while the rear doors move backwards. The entry and exit opening is very large, especially as there is no B pillar. When one of the



doors is opened, the integrated seat rotates 20 degrees outward to make it easier for the passenger to enter the lounge ("ID. Entry"). On closing the door, the seat rotates to face the direction of travel. Meanwhile, the driver now has a new display and control landscape and a steering wheel with a touch panel and integrated display, all redesigned down to the last detail.

**Fusion of dashboard and steering wheel.** The ID. ROOMZZ is not fitted with a conventional dash panel. In comparison to conventional vehicles, the ID. family offers a completely new package. This provides much more space, especially at the front, enabling it to be customised differently. In addition, Volkswagen has consistently based the concept car on the fully automated "ID. Pilot" mode and tailored the digital cockpit and steering wheel to it.

"ID. Drive". In the manual "ID. Drive" mode, the digital cockpit appears to hover in front of the driver along with the integrated steering wheel. The digital cockpit consists of a full glass-front panel. On the right-hand side of this panel, the 13.8-inch infotainment unit is integrated into a split screen and home button. The display is visually located in the centre of the vehicle, meaning it is easily reached by front-seat passengers and is easy to see for passengers in the back. The digitalised steering wheel is stylistically integrated into the panel. As well as sensitive touch-screen areas for handling the gear controls (P, R, N, D), it has a 5.8-inch display that shows relevant information such as navigation instructions in autonomous mode. There is also an AR head-up display, which shows information such as speed and warning signs. Thanks to Augmented Reality (AR), the head-up display also projects navigation instructions in the virtual space in front of the ID. ROOMZZ, enabling the system to show pictograms such as an arrow sign in the visual field where the driver has to turn off. Finally, the new "ID. Light" is integrated beneath the windscreen - this is an interactive light strip between the A-pillars through which the driver and passengers receive additional information. If the silent electric motors are ready for operation, this is shown by means of a light effect, as is the currently active driving mode ("ID. Drive" or "ID. Pilot"). Information regarding the assistance systems, navigation and the new CleanAir system are also displayed via the



light effects in this LED strip. At the same time, corresponding information is provided via "ID. Light" in the doors; each passenger has their own light zone.

"ID. Pilot". If the driver presses down for longer than five seconds on VW logo on the steering wheel, they trigger the fully automated "ID. Pilot" mode (level 4). The steering wheel transitions into the digital cockpit thanks to the "IQ. steering system". At the same time, the entire control panel slides back, providing extra room in the Open Space. The other guests on board are made aware of autonomous driving mode via the "ID. Light" elements in the doors and roof area.

"ID. Light". Every passenger on board the ID. ROOMZZ receives information intuitively via the new "ID. Light". As already outlined, the "ID. Light" features are located in front of the windscreen, on the upper segments of the door panels (illuminated wood finish pattern), on the outer areas next to the large panoramic glass roof above the relevant seat (likewise in a decorative pattern), and on an "ID. Light" roof console. Information is supplied via animated sequences. The animation appears from the virtual B pillar to the relevant seat or passenger, respectively. For example, the decorative patterns in the door panels show a welcome and goodbye scenario when entering and leaving the vehicle, and respond to a mode switch for the relevant seat (see "Seat scenarios and light zones" section); the occupant sees this information intuitively via corresponding light effects. Their counterparts in the roof also indicate the current driving mode as well as the welcome and goodbye scenario. The "ID. Light" roof console is only active in the "ID Pilot" autonomous mode; this is where information, e.g. for the CleanAir system, is displayed along with the welcome and goodbye scenario (motors "on" / "off"), depending on the situation.

**Seat scenarios and light zones.** The ID. ROOMZZ is equipped with four integrated seats, which are configured differently and can be rotated. Overall, there are three different seating modes en route that correspond to the relevant driving mode. In the manual "ID. Drive" mode, the seats typically face



forward while the backrests are up. If the driver switches to the fully automated "ID. Pilot" mode, the separate seats can be rotated inward 25 degrees to provide a very communicative atmosphere on board. When driving is fully automated, the driver can activate "ID. Pilot Relax" mode, in which every passenger can tailor the position of their seat to suit them – it can be moved from a standing to a reclined position in this mode. The driving and seating modes are combined with the individual light scenarios in "ID. Light". The seat settings can be specified via touch fields, each of which is located in the outer front area of the seating areas; the touch fields for opening and closing the doors and side windows are also here. The series version of the ID. ROOMZZ will have up to seven seats.

Clean air in all conditions. A CleanAir system uses an active filter system to ensure that the air inside remains clean even if the ambient air isn't. The driver and front-seat passenger can also access various pre-configured atmospheres such as "Breeze" or "Forest" via the infotainment system. The corresponding menu also provides information regarding air quality in the vehicle (air quality index) and current system activity.

Deliberate selection of materials and colours. Volkswagen is using ecologically sustainable materials in the interior of the ID. ROOMZZ. One example is the seats: They are covered with the new, visually appealing and tactile "Apple-Skin™" material – an innovative material with the same technical properties as artificial leather. The difference is in the production method itself: "Apple-Skin™" consists of a proportion of residual matter from apple juice production. They are turned into a new raw material which replaces a chemical component. It is currently possible to replace 20 percent of polyurethane used exclusively up until now with apple leftovers using a process that was developed inhouse especially for this purpose. The result is "AppleSkin™", a new product which uses existing and sustainable resources. Another example is the concept car's interior floor, which is made of oak and laid in a herringbone pattern. The Nordic influence of the oak (silver birch) perfectly complements the concept car's extremely modern interior. Specially processed wooden veneers are also



used in the "ID. Light" areas of the door panels. Volkswagen is using a new process here: "ligneah". In this case, the veneer is applied to a textile carrier material and an individual pattern is created with a laser. The flexible material can be used in combination with a huge range of components, opening up a completely new spectrum with regard to using wood. The choice of colours and refraction in the interior was no less important for the designers. Various elements – such as the seat linings – are painted in White Gold. The subtle white gold particles perfectly complement the geometry and graphics in the interior. The colour & trim designers use microfibre for the headliner and roof pillars. This material absorbs light influences very well so that light effects can focus as much as possible on the decorative areas in the doors and the digital cockpit.

#### Electric 4MOTION all-wheel drive

**225 kW system output.** The ID. ROOMZZ is powered by two electric motors. The front coaxial drive generates 75 kW while the rear electric motor with multi-step transmission generates 150 kW. The combination of both motors results in a system output of 225 kW. The rear axle provides propulsion as standard. An "electric propshaft" distributes the power of the 4MOTION four-wheel drive between the front and rear axles within fractions of a second once this becomes necessary due to driving dynamics. In addition, the ID. ROOMZZ can be continuously driven in four-wheel drive mode. Both motors are supplied with energy by a lithium-ion battery in the vehicle floor. The battery has an energy content of 82 kWh. Power electronics on the front and rear axle control the flow of high-voltage energy between the motors and the battery. Power electronics convert direct current (DC) stored in the battery into alternating current (AC). The on-board electronics are supplied with 12 volts via a DC/DC converter. Ideal weight distribution (approaching 50:50) is achieved by placing the battery in the middle of the vehicle floor and the drive units at both the front and the rear. The result: extremely agile and safe handling. The fully redevel-



oped running gear also has a significant influence on this, featuring electronic damping control, a multi-link rear axle, and a McPherson front axle.

**Driving performances and range.** The ID. ROOMZZ can accelerate to 100 km/h in 6.6 seconds; the maximum speed is capped at 180 km/h. The range of the concept car in the NEFZ cycle (China) is up to 475 kilometres, while in the European WLTP cycle the maximum range is 450 kilometres. The battery is charged via an inductive interface. Conventional charging via a plug is also possible.

#### Fusion of IQ.DRIVE systems in "ID. Pilot"

Drive or be driven. Volkswagen has made the decision to consolidate its driver assist systems involved in autonomous driving under the new umbrella brand IQ.DRIVE. Combining these systems will make driving more convenient and safer than ever before. As in the ID., the ID. CROZZ and the ID. BUZZ, the ID. ROOMZZ is designed for level 4 automated driving, meaning that the driver no longer needs to be on hand to operate the vehicle. Volkswagen took things a step further with the ID. VIZZION concept car, which requires no dashboard or driver at all (level 5). The ID. ROOMZZ is equipped for two scenarios: manual driving ("ID. Drive") and autonomous driving ("ID. Pilot"). As mentioned, the fully automated "ID. Pilot" driving mode is activated when the driver consciously touches the VW logo in the steering wheel for longer than five seconds. When in "ID. Pilot" mode, the concept car activates various laser scanners. Four of these emerge from the roof; the round roof sensors become aware of the environment through indirect illumination when in fully automated mode. The ID. ROOMZZ recognises other road users and the environment via laser sensors, and receives assistance from ultrasound sensors, radar sensors, lateral area view cameras and a front camera. Autonomous mode is deactivated by touching the VW logo once again. Within a few seconds, the "IQ. steering system" moves the steering wheel back to the position for the driver and synchronises the steering wheel position with the current direction of



travel. Only when the driver touches the capacitive steering wheel, the steering column is reintegrated into the steering system – from this moment on, the driver must steer the vehicle themself. In this way, maximum safety can be guaranteed when transferring vehicle control from person to machine and back again.



### Technical data for ID. ROOMZZ

**Technical basis** modular electric drive matrix

Status Concept Car

Driving modes (manual / autonomous) "ID. Drive" / "ID. Pilot"

Bodywork / interior

 Length:
 4,930 mm

 Width:
 1,903 mm

 Height:
 1,675 mm

 Wheelbase:
 2,965 mm

 Front axle track:
 1,597 mm

 Rear axle track:
 1,573 mm

 Wheels/tyres:
 265/40 R22

Variable Open Space Four integrated seats

### Drive system / range / driving performance

Drive: Rear and 4MOTION

Electric motor at front: 75 kW / 102 PS; 140 Nm

Electric motor at rear: 150 kW / 204 PS; 310 Nm

Total output: 225 kW / 306 PS

Battery capacity: 82 kWh

Range (WLTP / NEDC): 450 km / 475 km

Charging capacity: 150 kW (DC)

Charging time up to 80 % at 82 kWh: approx. 30 min

0-100 km/h: 6.6 s

Top speed 180 km/h