

The new Golf

# International vehicle presentation

### Portugal, November 2019

Note: This press release along with images and videos of the new Golf can be found online at www.volkswagen-newsroom.com.

All equipment specifications and prices apply to the German market.

1 = This version is not yet available for sale.



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#### <u>In brief</u>

### The new Golf - intelligent, connected and electrified

#### Unmistakably a Golf - the most progressive of all time

- **Eighth generation**. From December, the new development and design of the Golf will revolutionise the compact vehicle category with a shot of innovation
- **Exterior design.** Perfect proportions and striking lines lend the new Golf a strong presence and dynamic
- Interior design. Digital user interfaces create a revolutionary design and make life on board easier
- **LED lighting concept.** The new Golf applies cutting-edge LED technology as standard to turn night into day
- **Benchmark in the segment.** The new background lighting pushes boundaries in terms of design and interaction with the driver

#### Widest range of drive system options in its class -

#### five new hybrid versions

- **Sustainable.** More efficient, lower emissions new drive technologies cut consumption by up to 17 percent compared with the equivalent predecessor
- **Hybrid offensive.** The new Golf will be the first Volkswagen to launch with five hybrid versions (eTSI and plug-in hybrid)
- eTSI. The Golf is the only model in its class to offer three efficient 48 V mild hybrid drives, with outputs of 81 kW<sup>1</sup>, 96 kW<sup>1</sup> and 110 kW
- Plug-in hybrid. The plug-in hybrid version of the new Golf will launch with two power outputs: 150 kW<sup>1</sup>, and the more powerful 180 kW<sup>1</sup> GTE

#### Intelligent digitalisation means fast and intuitive operation

- A human-centred approach. Displays and controls have been consis ly digitalised so their functions are intuitive to use
- Innovision Cockpit. The Golf is the first model in its price segment to feature a completely digital, high-end cockpit as standard
- New voice control. Innovative voice control responds to natural

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voice commands and is very easy to operate

- Ask Alexa. Amazon's Alexa assistant is directly integrated into the Golf. Drivers can ask Alexa to play music, control compatible smart home devices, or retrieve information such as news and weather
- **Mobile key.** In future, compatible smartphones will make traditional vehicle keys unnecessary in the Golf
- **The Golf is always on**. We Connect and We Connect Plus bring streaming, internet radio and other online features on board
- **Features on demand**. We Upgrade will make it possible to retrospectively activate functions and systems in the Golf

#### Car2X as standard – Golf sets benchmarks in terms of safety

- **Car2X.** The Golf is the first Volkswagen featuring Car2X communication as standard to consequently set new road safety standards
- Windshield head-up display. Important information, such as speed or navigation notifications are within the driver's field of vision
- **IQ.DRIVE.** Travel Assist supports drivers with intelligent, active steering, accelerating and braking up to 210 km/h
- IQ.LIGHT LED matrix headlights. Interactive light technology significantly improves safety at night in the new Golf

#### Smart Home – everyone will feel at home in the new Golf

- **Personalisation 2.0.** The Golf saves driver settings and can access them in the cloud after each driver or vehicle change
- **3-zone air conditioning system.** Smart Climate offers intuitive air conditioning functions such as "warm hands" and "fresh air"
- Sound by Harman Kardon. A new 480-watt premium sound system from the US audio specialist guarantees perfect sound in the Golf

#### New Golf is launched with high-tech standard equipment

**Wolfsburg, November 2019**. The countdown has begun: The Golf pre-sales phase in Germany will begin in December; the rest of the European markets will follow suit in Q1 2020. The eighth generation of the best seller, which has sold more than 35 million units to date, marks the launch of a car that is not only one of the most innovative compact class models in the world, but one of the most progressive motor vehicles anywhere. Its digital



interior architecture opens up a new dimension of intuitive operation; assisted driving is possible up to 210 km/h; it is the first Volkswagen to use the collective traffic intelligence of Car2X to predictively warn of hazards; and with five hybrid versions on offer it brings electrification to the compact class. The standard equipment in the Golf has been massively expanded. The new basic version alone boasts high-tech features such as the Lane Assist lane keeping system, Front Assist area monitoring system with City Emergency Braking System and Pedestrian Monitoring, a new oncoming vehicle braking when turning function, Car2X, a digital cockpit, an online Infotainment system with 8.25-inch touchscreen, a multifunction steering wheel, as well as LED headlights and LED tail lights.

#### Dynamic evolution of the exterior

- Power, precision and LED technology dominate the new Golf's exterior
- The drag coefficient (C<sub>d</sub>) has been lowered from 0.3 to 0.275

**Charismatic exterior.** Since the debut of the first Golf 45 years ago, this Volkswagen has always been a vehicle that merged high levels of everyday suitability with a clear-cut, accurate design. The new Golf continues this approach. A prime example of aesthetically perfect design and function: the silhouette. The dominant design element in this context is the C-pillar, a distinctive element of the Golf. It makes the body dynamic towards the front, concentrates it towards the rear and transfers the iconic shape of the original Golf into the present. Just as striking are the powerful shoulder sections and very strong rear section, the charismatic front section with emphatically narrowed radiator grille and a "slice" right through the vehicle, appearing as a sharp line at the height of the door handles. LED technology replaces any conventional lighting technology in all versions – in this process, the new lighting design becomes a dominant and unmistake-able style element of the eighth Golf generation.



**Dimensions and aerodynamics.** A quick look at aerodynamic values confirms that every part of the body has been reshaped and refined in the wind tunnel: the end face has been lowered to 2.21 m<sup>2</sup> and the drag coefficient (C<sub>d</sub> value) has been cut to 0.275 from 0.3. These perfected aerodynamics have a positive impact on consumption, but that's not all: the new Golf is even quieter and more comfortable, as it takes on headwinds with the lowest-ever drag from air resistance.

#### Digital revolution in the interior

- The digital cockpit changes the way we drive
- Digitalisation enables intuitive operation

Self-explanatory, digital world. The new instruments and online Infotainment systems merge at the same level to form a digital cockpit. Individual areas featuring touch buttons and touch sliders perfectly round off this digital world of the Golf. A windshield head-up display is optionally available to further enhance the range of information available. Digitalisation throughout the vehicle allows largely self-explanatory and intuitive operation by the driver thanks to touch surfaces, natural voice control, and the Alexa web app. It is a clear statement that Volkswagen is pulling out all the stops, using digital controls and displays to elevate the interior to a new level of interaction between human and machine. The systems are not only connected to each other either, as thanks to an online connectivity unit (OCU) they have also been connected to the world outside the Golf. The standard OCU featuring integrated eSIM links to We Connect and We Connect Plus online functions and services. For example, online connection makes navigation interactive, as automatically displayed points of interest along the route are stored with associated information - for instance the telephone number to book a table in a restaurant via smartphone and the Golf Bluetooth interface. It is clear that the networked, digital cockpit in the Golf will change the way we drive cars. The technological leap this rep-



resents is comparable to the debut of the very first touch-based smartphones.

#### Assisted driving and collective intelligence to boost safety

- New Golf offers assisted driving up to 210 km/h
- Car2X communication warns of local hazards well in advance

**Connected technologies.** The eighth Golf is setting a new benchmark in the compact class in terms of assisted driving functions: Travel Assist, a feature that has been installed in a compact-class Volkswagen for the very first time, makes assisted driving of the Golf possible on motorways up to speeds of 210 km/h without having to actively steer, accelerate and brake. This consequently improves convenience and safety, particularly on long journeys. The new Golf is also the first Volkswagen to link up with its environment as standard: Car2X functionality applies the information provided by other vehicles within a radius of up to 800 metres in addition to signals from the traffic infrastructure to warn drivers and also forward these warnings to other Car2X models. As a result, collective intelligence becomes a reality. It's the dawn of a new phase of road safety considering Volkswagen, as a manufacturer of high-volume models such as the Golf, will turn Car2X warnings into the standard within only a very short time. The new IQ.LIGHT LED matrix headlights provide added safety with partly interactive light functions.

#### Eight new drive system versions for the Golf

- Hybrid campaign launched with the debut of the new Golf
- Pioneering, efficient TSI and TDI high-tech engines

**TSI, TDI, TGI, eTSI, plug-in hybrid.** The engine range of the new Golf features petrol (TSI), diesel (TDI), natural gas (TGI), mild hybrid (eTSI) and plugin hybrid drives. All petrol and diesel engines are turbocharged direct injec-



tion units. Once all engines are launched, the available output levels will range between 66 kW/90 PS<sup>1</sup> and over 221 kW/300<sup>1</sup> PS. For the first time, eight drive system versions will be available for the Golf. The new range will see two three-cylinder petrol engines generating 66 kW/90 PS<sup>1</sup> and 81 kW/110 PS<sup>1</sup> as well as two four-cylinder diesel engines with 85 kW/115 PS and 110 kW/150 PS being released for the first time. The new TSI versions include features like the innovative TSI Miller combustion process to ensure particularly low consumption and emissions. A new TDI feature: in these engines, Volkswagen applies twin dosing – dual AdBlue injection – to significantly cut nitrogen oxide emissions (NOx). Consumption in the new TDI: up to 17% lower than in the equivalent predecessor. Also new: four of the five hybrid drive systems of the eighth Golf generation.

Three eTSI and two plug-in hybrid variants. The new Golf will be the first Volkswagen that will be available with no less than five hybrid drives. In this process, 48 V technology is celebrating its debut at Volkswagen: a 48 V belt starter generator, 48 V lithium-ion battery and the most recent generation of efficient TSI engines have gone into the new eTSI mild hybrid drive system. The benefits are tangible: consumption has been cut by around 10% compared with the equivalent predecessor, and the vehicle is extremely agile and comfortable as it starts up. Volkswagen will offer the Golf in three eTSI output levels: 81 kW/110 PS<sup>1</sup>, 96 kW/130 PS<sup>1</sup> and 110 kW/150 PS. The new generation of the best-selling car will also be available as two plug-in hybrid drive versions. A new efficient version of this plug-in hybrid generates 150 kW/204 PS<sup>1</sup>, while the GTE version with a very sporty setup (upgraded from its predecessor) delivers 180 kW/245 PS<sup>1</sup>. Both Golf plug-in hybrid drive versions will launch with a new 13 kWh lithium-ion battery on board that enables a long electrically powered range and temporarily turns the Golf into a zero-emissions vehicle.



#### Four new equipment lines guarantee maximum individuality

- Golf, Life and Style as new equipment lines
- New R-Line equipment replaces the predecessor's R-Line packages

**Re-configured specification packages.** Volkswagen has completely reconfigured the range of equipment available for the standard 5-door Golf. The previously available Trendline, Comfortline and Highline equipment lines are no longer. In future, these will be replaced by Golf, Life and Style as well as a sporty R-Line version. All new lines feature significantly more comprehensive equipment than their equivalent predecessors. The basic equipment already includes features such as LED headlights and LED tail light clusters, Keyless Start, a digital cockpit, We Connect and We Connect Plus mobile online services and functions, a multifunction steering wheel, automatic air conditioning, Lane Assist lane keeping system, a new oncoming vehicle braking when turning function, Front Assist area monitoring system with City Emergency Braking System and predictive pedestrian protection system, as well as Car2X. Over the course of the next year, the standalone Golf GTI<sup>1</sup>, GTI TCR<sup>1</sup>, Golf GTD<sup>1</sup>, Golf GTE<sup>1</sup> and Golf R<sup>1</sup> models will follow.

# The Golf presents the most recent version of the Modular Transverse Matrix (MQB)

- The innovations of the Golf influence all MQB product lines
- Volkswagen produces over 3.4 million MQB models every year

**Powering progress.** The most recent version of the MQB is making its debut with the eighth generation of the Golf. For this reason the Golf is – and has always been – far more than just a product line. Volkswagen's worldwide success and the rise of Volkswagen AG to become number one amongst all automotive manufacturers are directly linked to the Golf. It was the brand's first MQB model in 2012, since when worldwide bestsellers have been developed on the basis of this extremely flexible technical



matrix – including Volkswagen models that have sold millions of units, such as the Passat, the US American Jetta and the successful Lavida and Sagitar models in China. These are supplemented by popular SUVs such as the Tiguan, T-Roc or the US model Atlas, which have an MQB heritage that goes right back to the Golf. If you add up Volkswagen models' 2018 production figures based on MQB alone, this results in more than 3.4 million vehicles. Around 5.1 million MQB units were produced in 2018, across the Group and including all brands. All these models will benefit from the most recent innovations in the eighth Golf generation, which indicates the starting point and guide model for MQB over the next decade.



Key aspects

# Design and dimensions: A benchmark for function and appearance

#### Perfect aesthetics and function

**Eye-catcher of a new time**. The Golf's design has always been considered the benchmark of its category – for seven generations it has been continuously enhanced, refined and in parts reinvented time and again. In this process, it has evolved its very own design DNA. It made the Golf an icon of compact vehicles, unmistakable and unforgeable. Volkswagen's design department has enhanced this DNA with the new Golf and shaped it to an eye-catcher of a new time.

Indicator of the present. Klaus Bischoff, Executive Director of Volkswagen Design: "The new Golf is an indicator of the present - this is what's possible nowadays within the volume segment. Its design represents the evolution of millions of people's 'feeling at home'." Since the début of the first Golf 45 years ago, this Volkswagen has always been a vehicle that merged high levels of everyday suitability with clear-cut, accurate design. The new Golf continues this approach. A prime example of aesthetically perfect design and function: the silhouette. The dominant design element in this context is the C-pillar, a distinctive element of the Golf. It makes the body dynamic towards the front, concentrates it towards the rear and transfers the iconic shape of the original Golf into the present. Klaus Bischoff: "The new Golf consequently morphs into a sculpture of space, aerodynamics and aesthetics." The ideal ratio of greenhouse (roof section plus glass panels) and body (lower section from the window line) also lends the new Golf a strong presence while the deep-drawn roof line adds an authentic, sporty character.

**Dimensions and aerodynamics.** Even though the new Golf does not seem as high, appearing more stretched and dynamic, its compact dimensions



have been maintained: 4,284 mm long, 1,789 mm wide and 1,456 mm high. The wheelbase totals 2,636 mm. A quick look at aerodynamic values confirms that every part of the body has been reshaped and refined in the wind tunnel: The end face has been lowered to 2.21 m<sup>2</sup> and the drag coefficient (C<sub>d</sub> value) cut to 0.275 from 0.3. These more advanced aerodynamics have been achieved through a range of adjustments, including a generally more aerodynamic design, C<sub>d</sub>-optimised exterior mirrors, aerodynamic corners and spoiler in the rear roof section, extensive underbody panelling, and aerodynamically optimised features in the wheel housing liners (displacement elements at front, spoiler at rear).

**Five-seat all-rounder.** Even on long journeys, the new Golf offers plenty of room for five people, along with a 380-litre luggage compartment capacity in this seat configuration. When the asymmetrically foldable rear seat backrest is folded down, the loading capacity increases to a maximum of 1,237 litres. Compared with the predecessor model, the shoulder room (1,420 mm at the front, 1,370 mm at the rear) and headroom (1,018 mm at the front, 968 mm at the rear) are practically unchanged.



#### New equipment lines:

### Basic version will already include networking features

Golf. Anything but basic. Volkswagen has completely reconfigured the equipment line for the five-door Golf, so the current Trendline, Comfortline, and Highline equipment lines will be replaced by the Golf, Life and Style lines, as well as a sporty R-Line version. Golf is the first equipment line in the range, and it adds significantly more standard features compared with the equivalent predecessor version. It brings on board the Lane Assist lane keeping system, Front Assist area monitoring system with City Emergency Braking System and predictive pedestrian monitoring, Car2X (local communication with other vehicles and the traffic infrastructure), digital instruments and an 8.25-inch Infotainment system, We Connect and We Connect Plus mobile online services and functions, a multifunction steering wheel, Climatronic (1-zone automatic air conditioning), the Keyless Go keyless central locking system, Bluetooth phone capability, LED headlights, LED reading lamps, and two USB-C ports in the glove compartment. The Golf configuration is delivered with 15-inch Leonhard steel rims. Standard interior fabric: Paper Soul in a dark, sporty shade.

Life. Connected and with background lighting. The Life configuration is already available this year as the first equipment line version. As well as everything included in Golf, the Life configuration features standard elements including 16-inch Norfolk alloy wheels, exterior background lighting including logo projection onto the floor and door handle recess lighting, an interface for high-voltage wireless phone charging, Wireless App Connect (wireless iPhone integration), a centre armrest at the front (with two USB interfaces and vents), a centre armrest at the back (including load-through function), chrome elements around the vents, window regulator switch and mirror adjuster, Park Distance Control, as well as the automatically activated motorway and city light. Also provided as standard: lumbar sup-



ports at the front, front passenger seat height adjustment, smartphone and map pocket on the front seats, an Infotainment system with additional functions, a 12 V socket in the luggage compartment, illuminated vanity mirror in the sun visors, and a height-adjustable luggage compartment floor. From the Life equipment line upwards, the Golf also comes with adjustable interior background lighting in ten colours. Standard fabric for seats and trim: light-coloured Maze Storm Grey or the darker Maze Soul.

**Style. Exclusive and assisted driving.** The new top equipment variant, Style, also includes the following standard equipment details that deviate from the Golf and Life features: 17-inch Belmond alloy wheels, additional exterior chrome features (including trapezoidal tailpipes and lateral window parapet), sports seats at the front with centre seat panels in ArtVelours (driver side as ErgoActive electrically adjustable seat), leather steering wheel and leather gear knob, pedals in aluminium finish, exterior mirror adjustment with memory function, interior background lighting in 32 colours, LED headlights with cornering light and all-weather light, LED tail light clusters with dynamic turn signal, Air Care Climatronic with 3-zone temperature control, and Travel Assist. Standard interior fabric: light-coloured Rock Strom Grey or darker Rock Soul.

**R-Line. Thoroughbred dynamism.** The new R-Line version is the sportiest specification package for the new Golf. Different R-Line packages had been available for the predecessor. These will be replaced in the eighth Golf generation by a new R-Line equipment concept. As with Style, the Golf and Life specification package scopes already form part of this package's basic configuration. The R-Line version is additionally characterised by the following features (extract): 17-inch Valencia alloy wheels, R-Line-specific bumpers, high-gloss black sill trims, a rear diffuser, premium sport seats featuring integrated head restraints, 32-colour interior background lighting, sports running gear, progressive steering, driving mode selection, black headliner, aluminium gear knob, multifunction steering wheel with perforated leather, R-Line-specific trims and contrasting topstitching as



well as brushed stainless steel pedals and foot rest. Standard interior material: grey Karoso Soul.

**Technologies can be retrofitted.** Regardless of the specification package: as a new feature, technologies on board the new Golf will, for the first time, not only be capable of updates, but in many cases also capable of upgrades, i.e. they can be enabled retrospectively (We Upgrade). This means that certain features including ACC Adaptive Cruise Control, Light Assist main beam control, the navigation system, App Connect (integrating smartphone apps), Wireless App Connect (wirelessly integrating iPhone apps), a Wi-Fi hotspot and voice control can also be activated retrospectively.

Nine colours available at launch: The new Golf will launch in nine different shades. These are: three non-metallic paints Urano Grey (standard), Pure White and Moonstone Grey; four metallic shades Atlantic Blue, Dolphin Grey, Lemon Yellow, and King's Red; as well as the pearl-effect Deep Black paint and premium mother-of-pearl-effect Oryx White.

**New panoramic sunroof.** Volkswagen has developed a new tilting and sliding panoramic sunroof for the Golf. The roof is opened and closed using an intuitive touch slider at the front of the headliner. The new panoramic sunroof has a new full-glass appearance with far fewer joints and a 5% larger glazed area. In order to prevent turbulence and noise at high speeds, the open roof can be set to close slightly as the car accelerates.



### Digitalised workplace:

new spaces - functionally and aesthetically connected

**Digital cockpit as standard.** The new Golf is a vehicle that has been more closely connected to the driver than ever before. The basis for this includes standard digital instruments (Digital Cockpit) with a 10-inch display, the also standard Composition Infotainment system (8.25-inch touchscreen with 1,083 x 480 pixels) and a multifunction steering wheel. It's important to note that all radio and radio navigation systems available for the Golf form part of the third generation of the modular infotainment matrix (MIB3). They are all linked to an online connectivity unit (OCU) featuring an eSIM. OCU and eSIM provide access to a permanently growing range of online-based functions and services that are made available using the brand's own Volkswagen We ecosystem. It means that, as standard, We Connect (unlimited usage period) and We Connect Plus (delivered with free use in Europe for one or three years) can be used in the new Golf.

**New digital architecture.** The fusion of the Digital Cockpit and Infotainment system creates a new, consistently digital architecture. Light and vision functions have also been redesigned, bundled and made more intuitive to operate: the light as well as the windscreen and rear window heating are now operated using a digital panel to the left of the instruments. The centre console is also characterised by perfect ergonomics: this area is now clearer than ever – particularly with the inclusion of the shift-by-wire gear knob for the automatic dual clutch gearboxes (DSG), which is significantly smaller than previously. The theme is continued in the new roof console, where operation has also been digitalised, including by means of a touch slider for the optional tilting and sliding panoramic sunroof.

**Networked Infotainment and entertainment.** The driver's digital workplace can be further enhanced, with a choice of Discover Media or Discover Pro optional 10-inch Infotainment systems (resolution: 1,560 x 700 pixels).



Their standard equipment differs as follows: the top-of-the-range navigation system includes high-end map navigation, Wireless App Connect and natural voice control. The functions of the high-end systems can be controlled using a configurable Home screen, which is as easy to operate as a smartphone display. A windshield head-up display is also available. The head-up display is directly projected onto the windscreen and thus virtually floats in front of the driver.

Harman Kardon sound system. New optional features in the Golf include the 480-watt Harman Kardon sound system with 12-channel Ethernet booster and 10 speakers. With one treble speaker (60 mm diameter) in the A-pillars and rear door trim, and a bass speaker (168 mm) in the front and rear door trim panels on each side of the vehicle, the speakers turn the vehicle interior into a concert hall. A centre speaker (116 mm) is added to the dash panel at the front, with a subwoofer (18 inches in diameter) fitted into the spare wheel well.

**New interior background lighting.** From the Life equipment line upwards, the Golf comes as standard with interior background lighting that can be set to ten different colours. The selected colour illuminates the decorative trim in the dash panel, decorative door trim at the front and rear, stowage compartments in the four doors, front footwells (also rear footwells from Style upwards) and central stowage compartment in the front centre console; digital instruments and the Infotainment system also take on the selected background colour. 32-colour background lighting is also available as an option depending on the vehicle variant. Along with the individual colours – variably adjustable for different interior zones – pre-configured lighting profiles can be selected by simply touching a "mood menu"; Infinity for a warm orange or Desire for a cool blue shade.

**Personalisation**. The customised settings are directly saved in the Golf or can optionally also be saved in the cloud, meaning they are once again available even after having changed driver or vehicle. Depending on the equipment, this includes the Innovision Cockpit setup, the seating position,



exterior mirrors and air conditioning system, background lighting and the coming/leaving home light.

#### Intuitive operation

Control more functions more easily. Volkswagen has always offered cars that are operated intuitively. In this context, the new Golf makes its debut as the brand's first model to feature a combination of digital instruments and MIB3, generally available as standard as outlined above. The vehicle merges the cockpit and Infotainment system on the same visual axis to create a digital display environment. Despite these systems' significantly enhanced functional scope, the display elements and controls are operated intuitively. Light and vision functions as well as roof console and Infotainment system elements are operated digitally, using the touchscreen, touch slider or direct access buttons depending on their function. The air conditioning system, Infotainment system, and panoramic sunroof are prime examples of just how intuitively the systems can be controlled, with sliders used for primary or secondary control in each case. To give a couple of examples from the air conditioning system and Infotainment system, there is a central slider here in the centre console, and it is divided into three sections: left, middle, and right. The driver or front passenger swipes or slides with a finger over the two outer sections to intuitively adjust the interior temperature. The same action in the slider's middle section intuitively changes the sound system volume. In Navigation mode, you can change the map zoom by swiping the middle slider section with two fingers - just like controlling a smartphone interface. For the panoramic roof, for example, just move a finger forward or backward on the roof console to open or close the sliding roof - it could not be more self-explanatory.

"Hello Volkswagen" – intuitive voice control. Intuitive operation in the Golf can also be supported by new, natural voice control on request. The system is simply activated by saying "Hello Volkswagen" or pressing the voice button on the steering wheel. For instance, the Golf now responds



with "Yes, please?" and "What would you like to do?" and reacts to intuitive voice commands, such as "Go to Lisbon" (navigation) or "I'm cold" (automatic air conditioning). New, digital microphones not only ensure perfect voice recognition and voice quality (for phone calls), but also locate the person who is speaking (driver or front passenger). You can control the navigation system, air conditioning system, phone and Infotainment with voice commands, for example. Integration of the optional Alexa web app will also follow.

"Alexa – what's the weather like today?" Volkswagen will offer voice support via Alexa in combination with the 10-inch Discover Media and Discover Pro Infotainment systems. The following vehicle-related functions can be controlled via Alexa: Point of Interest (POI) search within the local area, POI entry into the navigation map and volume control. Functions normally used around the house can also be called up, such as information requests, weather information, news, opening times, and smart home controls. A command such "Alexa, switch the light on in the lounge," is all it takes to activate the relevant function. Alexa in the Golf can be controlled in English (US/UK), German, French, Italian, and Spanish.

Smart electronics makes operation easier. The driver's gearshifts in the new Golf with dual clutch gearbox (DSG) are also controlled fully electronically: the system manages them as part of shift-by-wire. Thanks to these electronically operated gear changes, the gear knob firstly becomes a lot smaller to thus save space while simultaneously boosting gearshift comfort. For example, thanks to shift-by-wire the vehicle can already engage reverse while it is travelling forwards at low speeds to make manoeuvring easier. The Golf does not make its smooth shift to "R" until the speed is right. The electronics system consequently prevents incorrect operation. The optional 3-zone automatic air conditioning (Climatronic) is also controlled by smart technology. It boasts a number of new functions: Smart Climate can be used to launch preconfigured air conditioning functions – "Clear screen", "Warm feet", "Warm hands", "Cool feet", and "Fresh air" –



from the screen or via voice control. The new car menus for controlling the vehicle's functions are perfectly adapted to the system: here they depict the Golf in its entirety, both inside and out. If a function such as interior head-up display is configured, the driver can intuitively locate the relevant menu for the head-up display settings. The same applies to driver assistance systems, which can also be explored and configured via a user-friendly visual display.

Wireless App Connect. The most recent App Connect version also offers added convenience: Wireless App Connect. Drivers and front passengers can use App Connect to directly access selected smartphone apps using the Infotainment system. In the Golf 7, this was only possible by connecting a cable between smartphone and Infotainment system as the conventional standard. These functions are now also available wirelessly with the iPhone and Apple CarPlay. In this process, it is just as simple as using Bluetooth: the connection is automatically activated as soon as drivers get into the Golf with their smartphone.



# The connected world of Volkswagen We: Mobile online services and functions in the new Golf

#### We Connect and We Connect Plus as standard

**Online becomes the standard.** The new Golf has been integrated into the world of Volkswagen We – an independent ecosystem developed by the brand that is offered with an ever growing range of online services and functions. It means that, as standard, We Connect (unlimited usage period) and We Connect Plus (delivered with free use in Europe for one or three years) can be used in the new Golf. It is very simple: every Volkswagen driver logs into the vehicle using the We Connect portal or We Connect app to receive their Volkswagen ID. Using this ID, they can then log on in the new Golf to access the range of services provided by We Connect and We Connect Plus. What is more, each Golf has the following basic functions on board: personalisation (saves personal settings), e-Call (automatic or manual assistance in emergency situations) and Emergency Call Service (support by a multilingual call centre). Volkswagen covers the costs incurred for data required to use online services and functions. This offer merely excludes Media Streaming and Internet Radio as well as Wi-Fi hotspot.

**We Connect.** We Connect features the following functions:

- Mobile key (depending on configuration; unlock, lock and start the Golf using a compatible smartphone)
- Breakdown Call
- Vehicle Status
- Doors & Lights
- Automatic Accident Notification
- Vehicle Health Report
- Driving Data
- Parking Position
- Service Scheduling



**We Connect Plus.** Depending on the equipment, We Connect Plus features the following functions additionally to the We Connect scope:

- Area Alert
- Speed Alert
- Horn & Turn Signals
- Online Anti-Theft Alarm
- Online Auxiliary Heater
- Remote Ventilation Control
- Lock & Unlock
- Departure Times (for plug-in hybrid drive)
- Air Conditioning (for plug-in hybrid drive)
- Charging (for plug-in hybrid drive)
- Online Traffic Information plus hazard information
- Online Route Calculation
- Filling stations and charging stations
- Online Map Update
- Parking spaces
- Online POI Search
- Online Voice Control
- We Deliver (means you can receive deliveries and services in the Golf)
- Internet radio
- Media streaming (Tidal and Apple Music)
- Wi-Fi hotspot

**In-Car Shop.** Data plans for use of streaming services or the Wi-Fi hotspot can also be booked and renewed via the Infotainment system. It is also possible to activate add-ons from the In-Car Shop, such as We Park (cashless parking in 134 German cities), We Experience (optional, customised recommendations for restaurants, shops or filling stations along the route) and the Alexa web app, at no additional cost. The In-Car Shop can also be used to easily extend We Connect Plus. In future, the In-Car Shop will also



allow users to download additional functions – similarly to app stores on smartphones.

**We Connect Fleet.** The optional We Connect Fleet (digital fleet management) service has been developed for companies. This service offers the following functions:

- Digital Logbook
- Fuel Logbook
- Fleet Driving Efficiency
- GPS Tracking & Route Information
- Consumption Analyser
- Maintenance Management

**Mobile key.** In future, the smartphone will be the vehicle key. We Connect is once again the interface for this. Compatible Samsung smartphones are set up for this purpose using the We Connect app, then authorised once as the primary user via the Infotainment system and a one-time passcode. No mobile network connection is required to use the smartphone as a mobile key. It is sufficient to place the smartphone near the door handle in the same way as the keyless locking and starting system Keyless Access opens the vehicle. Place the smartphone in the centre console (in the storage compartment with interface for mobile telephone) to start the engine. Furthermore, it will also be possible to send the mobile key to friends or family so that they can also use their smartphone as a key.



### New drive systems: hybrid drive with 48-V technology or plug-in system

**Electrified efficiency**. The engine programme of the new Golf features petrol, diesel, natural gas (CNG), mild hybrid and plug-in hybrid drives. All petrol and diesel engines are turbocharged direct injection units. Following the launch of all engines, their output levels will range between 66 kW/90 PS and more than 221 kW/300 PS. For the first time, eight drive system versions will be available for the Golf. A new, efficient 6-speed manual gearbox has also been developed for front-wheel drive models; this has further cut CO<sub>2</sub> emissions. All engines in the new Golf comply with the Euro 6d emissions standard.

**Petrol engine (TSI).** The TSI engines equipped with petrol particulate filter generate 66 kW/90 PS, 81 kW/110 PS, 96 kW/130 PS and 110 kW/150 PS. The versions generating 90 PS and 110 PS are 1.0-litre three-cylinder engines that are used in the Golf for the first time. The TSI engines with 130 PS and 150 PS are 1.5-litre engines with a special feature: temporary Active Cylinder Management (ACT). All engines with an output up to 130 PS feature the efficient TSI Miller combustion process and a turbocharger with variable turbocharger geometry (VTG). TSI engines have been paired with a manual gearbox as standard. From an output of 110 PS, they will also be configurable as mild hybrid drives (eTSI) with 48 V system and dual clutch gearbox (DSG). As always, three 2.0-litre TSI engines for the Golf GTI, Golf GTI TCR and Golf R, two plug-in models, as well as a 1.5-litre TGI suitable for operation with natural gas (CNG) and petrol will be launched at a later date.

**Mild hybrid (eTSI).** The three eTSI mild hybrid drives of the Golf are world premieres. These are petrol engines that are coupled to a 48 V system plus 7-speed dual clutch gearbox (DSG). A 48 V belt starter generator, a 48 V lithium-ion battery and the latest generation of pioneering, efficient TSI



engines mean perfect performance while significantly cutting fuel consumption. The mild hybrid drives will be available with 81 kW/110 PS, 96 kW/130 PS and 110 kW/150 PS. All eTSI models feature a powerful brake energy recuperation function. The 48 V system also makes it possible to coast while the combustion engine has been completely switched off to save even more fuel. Restarting the engine is significantly more convenient thanks to the 48 V system. eTSI models additionally offer extraordinarily good moving-off performance thanks to electric boosts.

• 48 V mild hybrid drive in detail: the 48 V system will be used in vehicles in addition to the 12 V system. With its relatively small cable diameters and therefore low weight of the wiring harness, it enables the transmission of high electrical power. That leads to recuperation of significantly more energy during braking. The energy stored in the 48 V lithium-ion battery supplies the 12 V vehicle electrical system and drives the 48 V belt starter generator. This belt starter generator takes on the role of the alternator and starter while simultaneously operating as a small, lightweight electric motor that instantly boosts the drive torque when moving off. The output of the generator is transferred by the belt drive. The generator also starts the combustion engine – which is switched off as much as possible while the vehicle is moving – in a barely perceptible way.

**Plug-in hybrid.** The plug-in hybrid range will be split into a version geared towards maximum range, generating 150 kW/204 PS, and a GTE version designed towards performance, generating 180 kW/245 PS (system output in each case). The plug-in hybrid drive consists of elements including a 1.4-litre TSI engine, the electric drive motor and 6-speed DSG as well as a lithium-ion battery. The new battery is characterised by 50 percent more energy capacity (13 kWh) and thus an improved electric range, meaning that almost all daily journeys within an urban environment can consequently be covered without generating any local emissions.



**Diesel (TDI).** Volkswagen has developed the two diesel direct-injection engines for the eighth Golf generation from scratch. The 2.0-litre TDI engines generate 85 kW/115 PS and 110 kW/150 PS. Both TDI engines will be available to order with manual gearbox and DSG. The engines' efficiency has been significantly optimised, thus cutting CO<sub>2</sub> emissions while simultaneously improving responsiveness. A new twin dosing SCR system featuring dual AdBlue injection additionally cuts nitrogen oxide emissions by up to 80 percent in comparison to the predecessor. In the latest evolution stage of this SCR catalytic converter system, AdBlue is injected upstream of two SCR catalytic converters arranged in series as part of a targeted process. Consequently, the new TDI engines are amongst the world's cleanest combustion engines. Both TDIs will be available to order at the launch. Like the petrol engine GTI, the Performance TDI of the new Golf GTD will be ready to launch some time next year.

#### Drive versions offered on launch in detail

**1.5 TSI with 96 kW and manual gearbox.** Achieving 130 PS at speeds between 5,000 and 6,000 rpm, the Golf's TSI is a powerful and high-tech petrol engine. Thanks to ACT Active Cylinder Management, two of the four cylinders can be almost imperceptibly switched off as often as possible, minimising both consumption and emissions. A turbocharger with variable turbine geometry (VTG) sits alongside to provide exceptionally efficient dynamics in every engine speed range. The maximum torque of 200 Nm is available between 1,400 and 4,000 rpm. With its 6-speed manual gearbox (MQ200), the Golf 1.5 TSI can accelerate to 100 km/h in 9.2 seconds and reach speeds of up to 214 km/h.

**1.5 TSI with 110 kW and manual gearbox.** Offering 150 PS, the TSI in the new Golf is also equipped with ACT Active Cylinder Management and a 6-speed manual gearbox (MQ200). This petrol engine also delivers its maximum output between 5,000 and 6,000 rpm; the maximum torque of 250



Nm is produced within an engine speed range of 1,500–3,500 rpm. With this engine, the Golf reaches a top speed of 224 km/h, and goes from 0 to 100 km/h in 8.5 seconds.

**1.5 eTSI with 110 kW and DSG.** The 1.5 eTSI with 150 PS can also be combined with a 7-speed DSG (DQ200) as standard. It has the same output figures (110 kW between 5,000 and 6,000 rpm) as a TSI with the same power but without 48 V technology and DSG. The also identical maximum torque of 250 Nm is available within a range from 1,500 to 3,500 rpm. The Golf 1.5 eTSI accelerates from 0 to 100 km/h in 8.5 seconds and has a top speed of 224 km/h.

**2.0 TDI with 85 kW.** With 115 PS of power, the TDI is one of the most sustainable engines of its class worldwide thanks to twin dosing. This sustainability is paired with superior driving performance: the Golf 2.0 TDI with 6-speed manual gearbox has a maximum speed of 202 km/h at this output level. Going from 0 to 100 km/h takes 10.2 seconds for the Golf 2.0 TDI. The comfortable yet dynamic handling of this Golf is also made possible by the TDI's high maximum torque of 300 Nm (at 1,750–3,200 rpm). The four-cylinder engine generates its maximum output between 3,250 and 4,000 rpm.

**2.0 TDI with 110 kW and DSG.** The currently most powerful Golf TDI engine delivers 110 kW/150 PS between 3,500–4,000 rpm. This output level is linked to a 7-speed DSG. The impressive maximum torque of 360 Nm is achieved within the engine speed range of 1,750 and 3,000 rpm. As in the 115 PS version TDI, the 150 PS version is also equipped with the dual Ad-Blue injection system (twin dosing). Able to hit speeds of 223 km/h, the Golf 2.0 TSI DSG can also accelerate to 100 km/h in just 8.8 seconds.



### New assist and light systems: Car2X, Travel Assist and IQ.LIGHT in a Golf for the first time

**Car2X guarantees more safety.** Car2X communication means that the Golf is the first Volkswagen to communicate with other vehicles and traffic infrastructure in the vicinity to exchange information relevant to the traffic situation, within a radius of up to 800 metres. This information is exchanged within milliseconds. Thanks to the application of a harmonised Car2X standard (Wi-Fi p/ITS G5) within the European Union (EU) that is valid for all manufacturers, it is possible to transfer information between vehicles of all brands as well as the infrastructure within all EU member states. This "common language" is a crucial requirement to cut the number of road traffic accidents throughout all countries. Thanks to Car2X, drivers are notified and warned of local traffic hazards.

Car2X in detail: The traffic hazard alert function uses Car2X communication to notify and warn drivers about local hazards. Car2X communication registers the following scenarios: Accidents, broken down vehicles, tail ends of traffic jams, roadworks, emergency braking and emergency service vehicles. In the case of emergency service vehicles, for example, the hazard alert makes it possible to provide drivers with targeted, specific information about the distance and direction of approaching ambulances, fire service vehicles, police vehicles, etc. equipped with Car2X systems, thus allowing drivers to react in good time. The system can also help to reduce risks, for instance caused by emergency service vehicles running a red light during emergency deployments. Emergency service vehicles' response times can also be cut, for instance thanks to vehicles forming an emergency corridor in good time. Vehicles that have broken down or been involved in an accident can also highlight the potentially hazardous situation at an early stage by issuing



a virtual warning triangle (displayed in other vehicles' cockpit). The electronic brake light represents an additional safety feature: if vehicles driving further ahead of the Golf brake sharply, the brake lights of the vehicles behind are automatically activated. As a result, all vehicles behind and their drivers are able to react significantly earlier thanks to Car2X. It is clear that targeted visual and audible driver support in hazardous situations using direct Car2X communication in the Golf can prevent accidents – and that represents a milestone on the path to accident-free driving.

**Travel Assist.** The new Travel Assist feature in the Golf enables assisted driving up to 210 km/h. In this process, the system relies on systems including ACC Adaptive Cruise Control (longitudinal guidance) and Lane Assist lane keeping system (latitudinal guidance). Travel Assist is activated using the multifunction steering wheel. For legal and safety-relevant reasons drivers must permanently monitor the system – for this purpose, they must have at least one hand on the steering wheel. Thanks to new capacitive sensor technology in the steering wheel, it is sufficient if drivers merely touch it. However, if they let go of the steering wheel for more than 15 seconds, visual and audible warning signals and a braking jolt are issued and implemented. The driver must react by this point at the latest and touch the steering wheel, otherwise Emergency Assist is activated and the Golf is brought to a stop.

ACC with predictive speed detection. The latest generation of Adaptive Cruise Control in the Golf is predictive. In this process, the system calculates the position of the Golf based on route and GPS data from the navigation system to lower its speed before reaching bends, roundabouts, junctions, speed limits and built-up areas. At the same time, ACC accesses the Dynamic Road Sign Display via the front camera and adjusts the speed as soon as a limit has been detected. The highest ACC development stage will also feature Traffic Jam Assist.



**Front Assist.** Front Assist offers new functional scopes. The area monitoring system operating on the basis of a radar sensor and in conjunction with the front camera warns and brakes in emergency situations in the event of an insufficient distance to the vehicle ahead – using the City Emergency Braking System and Pedestrian Monitoring, even at very low speeds in built-up areas. This range of functions is now enhanced by Cyclist Monitoring, swerve support and – for the first time in a Volkswagen – oncoming vehicle braking when turning function.

**Oncoming vehicle braking when turning.** When the vehicle turns left, the Golf featuring oncoming vehicle braking when turning automatically brakes the vehicle to a stop (while simultaneously emitting an audible and visual warning), providing there is an oncoming vehicle approaching on the lane the vehicle is intending to cross. Depending on the speed at which both vehicles are travelling, the oncoming vehicle braking when turning function can prevent an accident or mitigate the consequences within system limits.

**IQ.LIGHT – LED matrix headlights.** Volkswagen will offer the new Golf with three different LED headlight versions. For the very first time, the top-of-the-range version will feature particularly powerful IQ.LIGHT – LED matrix headlights in the compact vehicle category. A similar version of the system had been introduced for the first time in the current Touareg before it was transferred to the new Passat. The driver switches on the system using Dynamic Light Assist. Using 22 LEDs per each headlight matrix module, it activates up to ten different, partly interactive light functions and projects them onto the road surface, depending on the Golf model. The sliding turn indicator function of the IQ.LIGHT LED matrix headlights represents a further feature that has been integrated into the Golf for the very first time. The sliding turn indicator function has a positive effect on active safety as a result of its striking looks. Overview of IQ.LIGHT – LED matrix headlight functions:



- Dipped headlight (activated on the basis of speed)
- Main beam (activated on the basis of speed)
- Cornering light (activated on the basis of steering wheel angle or turn signal, also when reversing)
- Poor weather light (activated by driver)
- Motorway light (activated on the basis of speed and GPS data)
- Dynamic cornering light in City Light, dipped headlight, motorway light, main beam and partial main beam (activated on the basis of steering wheel angle)
- Sign glare control (activated on the basis of dazzling sensors in the front camera)
- City Light (activated on the basis of speed and GPS data)
- Partial main beam (activated on the basis of dazzling sensors in the front camera)
- Travel mode (switch between left-hand and right-hand traffic, activated by driver in the Vehicle menu)

#### LED technology as standard

LED headlights and tail light clusters. LEDs already represent the preferred light source from the basic model of the new Golf. LEDs capable of generating daylight conditions for the dipped beam, main beam, position light and daytime running lights are already available with the standard headlights. The tail light clusters at the rear also exclusively feature LED technology. The design and LED outlines thus create an unmistakable, threedimensional night light signature at the rear. The brake light of the optional, top-of-the-range tail light also features a striking switchover function between LED signatures (click-clack effect) and this version's turn indicator function also features sliding design.



**Exterior background lighting.** Depending on the equipment configuration, the new Golf features exterior background lighting for the first time. A Coming Home and Leaving Home animation function is also available as an option. The exterior background lighting is realised via the headlights, tail light clusters, door handle recess lighting and welcome lights in the exterior mirrors. The Coming Home function is activated by switching off the ignition, and Leaving Home by unlocking the Golf. The function is already started as you approach the car with the vehicle key.



# The perfected running gear: new driving dynamics manager, enhanced DCC and precise fine tuning

**Improved comfort and dynamics.** Volkswagen has enhanced and perfected the Golf's running gear. In particular, ride comfort has been further improved again. In addition, a new driving dynamics control system has been developed for the eighth-generation Golf: the driving dynamics manager including an new evolutionary stage of the adaptive chassis control (DCC). This significantly increases the spread between maximum comfort and maximum dynamics, and the Golf benefits from significantly sharpened driving dynamics as a result.

#### The driving dynamics manager

**Central and higher-level control.** In the eighth-generation Golf, Volkswagen has introduced a new, central and higher-level control system for the functions that influence handling: both the XDS function and the lateral dynamics components of the regulated dampers (optional DCC) are controlled by the driving dynamics manager. The self-steering behaviour of the Golf can be significantly influenced by light wheel-specific braking interventions as well as targeted wheel-selective adjustment of the damper hardness. The already neutral and stable vehicle handling in the basic configuration is further enhanced as a result.

**Perfectly matched.** The driving dynamics manager permits selection of the right control system at the right time for any driving manoeuvre. This avoids undesirable superposition or neutralisation of the effects of the XDS and DCC systems; the systems therefore work together perfectly and play a decisive part in shaping the dynamic character of the Golf. The handling and steering behaviour is much more precise thanks to the use of the enhanced DCC and XDS function; the control interventions are even more



sensitive than before. The dynamic roll movements of the vehicle are also reduced and damped more effectively; the new Golf therefore responds perceptibly faster to the driver's steering commands and can be driven even more intuitively right to the limits.

#### The adaptive chassis control DCC

Wider spread. The adaptive chassis control DCC continuously reacts to the road surface and driving situation, and during this process takes into account various elements including steering, braking and acceleration manoeuvres. By means of the set driving profile mode, the driver can influence the reduction in body motion as desired. The required damping is calculated for each wheel and adjusted at the four shock absorbers within fractions of a second. Consequently, DCC always provides the highest level of driving comfort and ensures ideal driving dynamics in combination with the driving dynamics manager. In the new Golf, the vehicle setup can also be extended in INDIVIDUAL mode beyond the existing range of the fixed COMFORT, ECO and SPORT modes. Using a digital slider, the driver can individually and precisely set and store their personal driving profile. The slider also continuously influences the lateral dynamics of the Golf via DCC and XDS. It is now also possible to apply intermediate settings in between the familiar modes. The Golf also offers additional adjustment ranges beyond anything that has gone before: beyond the COMFORT setting the body is "decoupled" from the road surface as much as possible, thereby further boosting driving comfort. After SPORT mode there is an additional adjustment range that features maximum damping for minimum body movement and exceptionally direct vehicle reactions. This means the Volkswagen's cornering and responsiveness can be set to respond to steering commands in a way that is more comfortable and quiet or more sporty and agile.



#### The running gear layout

**Two different rear axles.** A McPherson axle is used at the front, with a torsion beam axle (below 110 kW and front-wheel drive) or multi-link suspension (from 110 kW or all-wheel drive) at the rear.

**McPherson front axle.** At the front of the Golf, a McPherson front axle (track 1,549 mm) with lower wishbones and track-stabilising scrub radius ensures optimal handling and steering characteristics; vibration behaviour is very well balanced. A subframe is centrally positioned in relation to the front axle. This frame is designed for high rigidity and supports the steering and engine mounting parts along with the front axle components. In combination with the adaptive chassis control (DCC), the subframe is realised with an extremely rigid aluminium structure which is approximately three kilograms lighter and thus further improves driving dynamics. The weight-optimised tubular anti-roll bar effectively reduces the body roll of the Golf. The rubber mounts are directly vulcanised onto the anti-roll bar; this process guarantees optimal acoustic characteristics as well as outstanding driving dynamics responsiveness. The bonded rubber mountings of the transverse links have been optimised for enhanced comfort and higher steering precision.

Torsion beam rear axle. Every Golf below 110 kW output and with frontwheel drive is delivered with a torsion beam rear axle. The modular lightweight axle (track 1,519 mm) consists of a transverse profile open at the bottom, into which an insert plate is welded on each of the outer ends. Different torsion rates can be achieved by differences in the length of the insert plates. This approach provides a significant weight benefit compared with a welded-in tubular anti-roll bar. The arrangement of a transverse profile that is open at the bottom also optimises the roll behaviour and transverse rigidity. The modular lightweight axle is ideally suited to small engines, and also provides outstanding comfort and handling characteris-



tics in combination with the McPherson front axle. An axle with a higher torsion rate is used in combination with the optional sports running gear. The locating mounts of the axle are designed as hydro-bushes to increase driving comfort and the acoustic properties of the axle.

**Multi-link rear axle.** From an engine output of 110 kW, Volkswagen combines the McPherson front axle with a multi-link rear axle. This axle is also used in the all-wheel drive (4MOTION) versions of the Golf. The main focus for Volkswagen here was on the areas of kinematics, acoustics, weight and modularity. The basic concept of consistently separating longitudinal and transverse rigidity has been retained. The low longitudinal rigidity of the axle is generated by the soft axle locating mount of the trailing arm to further increase driving comfort. The kinematic and elastokinematic axle characteristics have been revamped compared with the axle on the predecessor: modified transverse link mounts and newly designed hub carriers significantly improve steering precision and driving stability. The track and camber values are set individually as required for each vehicle type via eccentric bolts on the spring link and upper transverse link. The connection of the tubular anti-roll bar and shock absorber at the spring link is a key design feature; this reduces the forces within the axle.

#### Two steering systems

**Noticeably more direct.** Two different steering systems are available for the new Golf. A steering rack with linear ratio is used in the basic version. In comparison with the predecessor, the ratio of this steering system is now noticeably more direct (i = 14.6 instead of 15.0), reflecting the smaller steering angle requirement and allowing more instantaneous vehicle response. A progressive steering system is again optionally available. This features an even more direct on-centre ratio (i=14.1) with only two steering wheel turns from lock to lock. New algorithms have been established in the software of both systems which in particular further enhance the dy-



namic response of the steering. The steering therefore contributes decisively to the dynamic character of the new Golf: agile, precise, stable and exactly steerable right up into the high-speed range.

#### Wheels and tyres

Low rolling resistance. Depending on equipment or chosen option, the new Golf is delivered with wheels in sizes from 15 to 18 inches. All tyres of the Golf have been developed for especially low rolling resistance and balanced acoustic properties in combination with excellent driving comfort and optimum driving dynamics characteristics. When developing the wheels and tyres, Volkswagen attached great importance to high steering precision, direct vehicle response and a high level of driving stability. For this reason, the rim width (flange-to-flange dimension) was increased by half an inch on the 16- and 17-inch wheels. The wider wheels ensure faster and significantly more linear responsiveness of the tyres to steering movements and therefore perfect the dynamic character of the new Volkswagen.



### The history of the Golf: seven generations and more than 35 million units

#### Golf Mk1 - 1974 to 1983

Initial impulse. The first series-production Golf rolled off the production line in Wolfsburg in March 1974 and was available at dealerships from May in the same year. A new era definitively began where the Beetle had dominated the scene with its rear-mounted engine and rear-wheel drive for many decades: the era of the front-mounted engine installed across the body and front-wheel drive. The Scirocco and the Passat, introduced in 1973, had kicked off this trend shortly before. With the Golf, the class produced in the highest volumes had also been converted to the new technology. As the successor to the legendary Beetle, of which more than 21.5 million were produced, the Golf Mk1 - developed by Giorgetto Giugiaro and Volkswagen - had immensely high expectations to live up to if it was to continue the story that the Beetle started - the most successful car in the world ever, at that point. As it turned out, the modern and safe drive system concept, great flexibility offered by a tailgate and folding rear seat backrest, and of course its design, were so convincing that by October 1976, it was already time to celebrate the millionth Golf produced. 6.99 million examples of the first generation of the Golf - including all derivatives and the (at the time) structurally identical Jetta - were sold on all of earth's continents.

#### Golf Mk2 - 1983 to 1991

The first evolutionary stage. It was the second Golf with which the baby boomer generation, hovering around the age of 50 nowadays, learnt to drive: while the predecessor had already become the favourite amongst driving instructors and learner drivers, the new Golf now finally and irreversibly conquered this generation that was later also named after this



vehicle. And it was this Golf that made progress available to the masses for the first time – with technologies including a lambda-probe-controlled catalytic converter, the anti-lock brake system or the product line's first all-wheel drive. In June 1988, the Golf already exceeded 10 million vehicles produced: a tremendously high figure. After 6.3 million produced vehicles, the second Golf generation was phased out in summer 1991.

#### Golf Mk3 - 1991 to 1997

The victory of safety. From August 1991, Volkswagen kick-started a new era of safety with the third generation of the Golf. Firstly, the Mk3 Golf was the product line's first model available with front airbags from 1992 and secondly, great progress within the context of body design also led to significantly improved crash properties. Volkswagen revolutionised passive safety as this improved protection benefited millions of car drivers around the globe. However, several more product line milestones are linked to the Mk3 Golf: the first six-cylinder engine (VR6), the cruise control system, the first oxidising catalytic converter for diesel engines, the first diesel direct injection engine and the first side airbags. In May 1994, Volkswagen celebrated 15 million produced Golf vehicles. In 1997, the third generation was phased out after 4.83 million produced vehicles.

#### Golf Mk4 - 1997 to 2003

**Style icon.** Today the Mk4 Golf is considered a pioneering style icon amongst design experts – no doubt this also comes as a result of it bridging the gap to the 1974 Golf Mk1 with all its clear features and the product line's striking C-pillar design. With the Mk4 Golf Volkswagen implemented a completely new quality standard within the segment. In parallel, the debut of ESP made further contributions to making safety available to the masses. Later, ESP became series production standard in Germany first. The Golf GTI 132 kW, launched in 2001 (to mark the GTI's 25th anniver-



sary), is already a sought-after classic. It was followed in 2002 by the first Golf with direct petrol injection engine (FSI) and the debut of headprotection airbags installed as standard. In 2002, Volkswagen also introduced what was then the sportiest Golf: the R32 with a top speed of 250 km/h. In 2003, it was this Golf R32 that became available with a dual clutch gearbox (DSG) for the very first time. After 4.99 million vehicles built, the Mk4 Golf made space on production lines for the Mk5 Golf that same year.

#### Golf Mk5 - 2003 to 2008

End of class boundaries. It was the fifth Golf generation that offered comfort and dynamics that went beyond those of quite a number of competitors within the upper mid-sized vehicle class. The same rang true for quality. A value that underlines the stability of the laser-welded body is that its torsional rigidity had increased by 35 percent in 2003 upon the debut of the Golf Mk5. This also marked the first time that the Golf was optionally available with side airbags in the rear – in conjunction with the six standard airbags (front, sides at the front, head-protection airbag) this now meant that eight of these protecting, inflatable pads were on board the vehicle. In terms of comfort and dynamics the Golf Mk5 scored high marks thanks to features including the new four-link suspension rear axle and a new 7speed DSG, bi-xenon headlights, rain sensor as well as a tilting and sliding panoramic sunroof, plus the debut of the first turbocharged direct petrol injection engine in the Golf GTI as well as the world's first Twincharger featuring turbocharging and compressor-based charging. When the Golf Mk6 was introduced in 2008, 3.4 million units of all available Mk5 variants had been produced.

#### Golf Mk6 - 2008 to 2012



**High-end compact class.** By the end of July 2012, a further 2.85 million Golfs had been produced in only four years on the basis of the sixth generation that was introduced in 2008. And safety once again took a great leap forward this time: the still laser-welded body was so stable that it scored the maximum of five stars in the EuroNCAP crash test with flying colours. A further airbag had now also been included on board as standard: the knee airbag. In terms of quality, the interior of the Mk6 Golf was considered particularly pioneering. New assist systems, such as Light Assist dynamic main beam control, Park Assist, Hill Start Assist and technologies including adaptive chassis control DCC made the 2009 "World Car of the Year" the most progressive Golf at this point in time. Also available: features, such as the start/stop system and energy recovery mode, dynamic cornering light and LED tail light clusters.

#### Golf Mk7 - 2012 to 2020

**Reversing the weight spiral.** On 4 September 2012, Volkswagen celebrated the seventh Golf generation's world premiere in Berlin. Just one day later, pre-sales of this best-seller that had accrued 29.3 million sales at that point launched in the first countries. The weight of the new Golf had been reduced by up to 100 kg to reverse the often-quoted weight spiral. Depending on the engine, it was possible to cut consumption by up to 23 percent compared with the predecessor. Volkswagen additionally launched the Golf on the market with an entire armada of new assist systems. These included the Automatic Post-Collision Braking System, a proactive occupant protection system as well as ACC Adaptive Cruise Control and the Front Assist area monitoring system including City Emergency Braking System. To date, around 6 million units of the Golf Mk7 have left the factory gates.



### The technical data of the new Golf

	Golf 1.5 TSI	Golf 1.5 TSI	Golf 1.5 eTSI	Golf 2.0 TDI	Golf 2.0 TDI	
Max. kW / PS	96 / 130	110 / 150	110 / 150	85 / 115	110 / 150	
at rpm	5,000 - 6,000	5,000 - 6,000	5,000 - 6,000	3,250 - 4,000	3,500 - 4,000	
Max. Nm	200	250	250	300	360	
at rpm	1,400 - 4,000	1,500 - 3,500	1,500 - 3,500	1,750 - 3,200	1,750 - 3,000	
Capacity	1,498 cm <sup>3</sup>	1,498 cm <sup>3</sup>	1,498 cm <sup>3</sup>	1,968 cm <sup>3</sup>	1,968 cm <sup>3</sup>	
Gearbox	6-gear manual	6-gear manual	7-gear DSG	6-gear manual	7-gear DSG	
Top speed	214 km/h	224 km/h	224 km/h	202 km/h	223 km/h	
0-100 km/h	9.2 s	8.5 s	8.5 s	10.2 s	8.8 s	
Length	4,284 mm					
Width	1,789 mm					
Height	1,456 mm					
Wheelbase	2,636 mm					
Frontal area	2.21 m <sup>2</sup>					
Drag coeffi- cient	0.275					
Luggage com- partment	380-1,237 litres					