

# The new BMW G 310 GS.

## Table of contents.



- 1. Overall concept.**  
(Short version)..... 2
  
- 2. Technology.** ..... 5
  
- 3. Design and colour concept.** ..... 12
  
- 4. Equipment program** ..... 15
  
- 5. Production and quality.** ..... 16
  
- 6. Technical specifications.**..... 18

# 1. Overall concept. Short Version.



## **The all-new BMW G 310 GS – ready for everyday adventures.**

With the BMW G 310 GS, BMW Motorrad is creating a new experience in the displacement segment below 500 cm<sup>3</sup> since 2016. Extremely compact, robust and highly versatile in design, it immediately established itself as a genuine BMW GS - especially for newcomers. Four years after its début, BMW Motorrad now presents the new BMW G 310 GS. Versatile, safer and more dynamic – whether in everyday traffic, during pleasure rides on country roads or off-road in easy terrain.

The G 310 GS is a genuine GS: a highly contemporary product with a level of versatility that is currently unrivalled in the segment. It is nimble and agile in city traffic while over light terrain it is supremely robust. This makes it the perfect companion for the adventures of everyday riding. Extremely compact yet mature and comfortable, the GS opens up a whole new world of riding experience within its segment. It is precisely this versatility that makes the G 310 GS unique in the entry-level segment.

### **Typical GS design.**

The BMW G 310 GS can be identified as a genuine GS at first sight. With its characteristic, high front fender, striking flyline and short, high rear, the BMW G 310 GS features classic elements of its big GS sibling models. Its compact proportions with a short wheelbase, a 19-inch front wheel and extended spring travel make for a typical upright posture, promising an agile, nimble riding response.

### **At home on the roads of the world.**

Like the G 310 R, the G 310 GS is also designed for the world market. It takes diverse fuel qualities as well as meeting all emissions standards and local requirements. It is at home on all the roads of the world, bringing the hallmark BMW premium aspirations to the segment below 500 cc.

### **Innovative single-cylinder engine for dynamic riding fun and suitability for a broad range of uses worldwide.**

The heart of the new BMW G 310 GS is still the reliable 313 cm<sup>3</sup> liquid-cooled single-cylinder engine with four valves, two overhead camshafts and electronic fuel injection. The cylinder inclination to the rear and the cylinder head rotated by 180 degrees with intake at the front and exhaust at the rear remain the design characteristics. This arrangement follows the logic of straight and

performance-enhancing combustion air ducting and results in a particularly compact vehicle architecture. With an output of 25 kW (34 HP) at 9 500 rpm and a maximum torque of 28 Nm at 7 500 rpm, the single-cylinder engine of the new BMW G 310 GS is the ideal partner for dynamic motorcycling pleasure, including in the current BS-VI.

For use in the new BMW G 310 GS, the engine has been equipped with a so-called "electronic throttle grip" (electromotive throttle controller) and now offers an even more sensitive throttle response. Automatic idle speed increase when starting also prevents a possible sudden stalling of the engine.

**Perfectly designed BMW GS ergonomics for relaxed motorcycling fun on the road and over light terrain.**

The all-new G 310 GS provides a relaxed seating position that enables carefree motorcycling pleasure both on the road and during excursions along forest paths and gravel tracks. As is characteristic of BMW Motorrad, all switches and controls are simple and secure to handle. Great importance was attached to simple and safe operation, taking into account the most diverse rider anatomies.

**Bridge-type tubular spaceframe, upside-down fork and long swinging arm for a high degree of ride stability, a precise steering response and light handling.**

In terms of its suspension, the all-new G 310 GS is similar to the G 310 R roadster in using a tubular steel spaceframe with bolt-on rear section that combines torsional rigidity with robust quality. Given its good stiffness balance, this provides the basis for excellent ride stability and a precise steering response. The front wheel suspension is taken care of by a solid upside-down fork while at the rear there is an aluminium swinging arm in conjunction with a spring strut that is mounted on it directly.

**High-performance brake system, ABS as standard and multifunction instrument cluster.**

Like all BMW motorcycles, the all-new G 310 GS comes with ABS as standard. It combines a high-performance brake system with 2-channel ABS for efficient deceleration and short braking distances. For use over light terrain the ABS in the all-new G 310 GS can be conveniently deactivated at the press of a button if required. The G 310 GS instrument cluster has a large liquid crystal display that offers excellent clarity and a wide range of information.

**A genuine BMW.**

Like the G 310 R, the G 310 GS represents everything that BMW stands for: progressiveness, outstanding quality and of course many years of carefree partnership with its owner. Excellent components and materials come together to make it a real all-rounder. The G 310 GS is the GS below 500 cc, providing worldwide entry to the premium world of BMW Motorrad.

## 2. Technology.



**The all-new BMW G 310 GS - carefree riding fun, enormous versatility.** Powerful propulsion, easy controllability and nimble handling – with the all-new BMW G 310 GS, BMW Motorrad has expanded the BMW GS family to include yet another dynamic member. With its slim, wiry structure, the new single-cylinder GS comes over as bold, light and adventurous at the same time, and with its low weight and seat height it embodies an attractive entry option to the fascinating world of experience of BMW GS motorcycles.

**A new interpretation of the hallmark BMW GS qualities.**

Derived from the G 310 R roadster, the all-new G 310 GS offers dynamic performance and comfort enhanced with practically oriented off-road capability for light terrain. It brings the characteristic qualities of a BMW GS to a segment that is new to BMW Motorrad, demonstrating mastery of diverse disciplines: the daily commute to work, riding through town or dynamic motorcycling both on and off country roads.

Easy manoeuvrability and the powerful BMW single-cylinder engine make it a universal partner with a broad range of uses - not least thanks to its low fuel consumption and a relaxed seating position. Following in the line of all BMW motorcycles, the all-new BMW G 310 GS also stands for innovative technology and high quality, providing many years of carefree riding pleasure.

BMW Motorrad laid the foundation for the varied spectrum of BMW GS motorcycles as long ago as 1980 when it introduced the R 80 G/S as the first travel enduro bike of its kind, and the outstanding talents of this genre apply to this day – excellent function, comfort and staying power. BMW Motorrad continues to foster and develop these core strengths, transferring them successfully to numerous BMW Motorrad series.

The all-new G 310 GS is the latest instance, presented not just as a genuine “small” BMW GS but also perpetuating the more than 90-year BMW tradition of 1-cylinder models in pioneering fashion with its state-of-the-art single-cylinder engine.

**Innovative single-cylinder engine for dynamic riding fun and suitability for a broad range of uses worldwide.**

The centrepiece of the all-new BMW G 310 GS is the 313 cc water-cooled single-cylinder engine familiar from the G 310 R roadster with four valves and two overhead camshafts together with electronic fuel injection. The capacity of 313 cc results from a bore of 80 millimetres and a stroke of 62.1 millimetres. Designed for the world market and therefore offering compatibility with various fuel qualities, the compression ratio is a comparatively moderate 10.6:1. With an output of 25 kW (34 ps) at 9 500 rpm and a maximum torque of 28 Nm at 7 500 rpm, the engine of the all-new G 310 GS is a very dynamic partner in conjunction with the bike's low unladen weight of 169.5 kilograms according to DIN.

**Backward-tilted cylinder and cylinder head rotated by 180 degrees for perfect packaging and a high degree of efficiency.**

Unlike conventional single-cylinder concepts, the engine of the all-new G 310 GS offers a series of unusual technical solutions. First and foremost, the engine is striking with its backward-tilted cylinder and cylinder head rotated by 180 degrees. The intake tract is positioned at the front when viewed in the direction of travel, while the exhaust tract is at the rear. The ignition spark is supplied by a spark plug placed centrally in the combustion chamber.

This configuration not only follows the logic of a straight, power-enhancing supply of fresh air-fuel mixture, it also has positive consequences in terms of the bike's architecture as a whole. In conjunction with the consecutively positioned transmission shafts, this creates a low centre of gravity that is shifted towards the front wheel as compared to a conventional arrangement. At the same time, this set-up and the preservation of an advantageously short wheelbase allows for a longer swinging arm, thereby ensuring a stable ride response. The result is agile handling, clear feedback from the front wheel and outstanding vehicle control.

The engine concept with the intake side at the front makes for a generously sized intake silencer positioned directly behind the steering head and a newly designed, very short fuel tank. This prevents any excessive sloshing of the fuel back and forth, so undesirable reactions to uncontrolled shifts in weight are avoided.

### **High-performance valve gear as in the S 1000 RR, DLC-coated engine components and Nikasil cylinder liner.**

Fitted with an electric starter motor, the single-cylinder engine of the all-new G 310 GS offers modern, horizontal separation of the engine housing, innovative technical solutions and a selection of high-quality materials. The valve gear with two overhead camshafts is based on that of the S 1000 RR, for example, while very light, speed-resistant rocker arms with an extremely hard DLC coating (Diamond Like Carbon) that minimises friction and wear are responsible for activating the four valves, likewise as in the BMW superbike. The valve angle is 11.2 degrees on the intake side and 13.3 degrees on the exhaust side. The diameter of the intake valves is 33.5 millimetres, that of the exhaust valves is 27.2 millimetres and that of the intake pipe fuel injection throttle valve is 42 millimetres.

The resilient and low-friction DLC coating is also applied to the gudgeon pin. It enables the pin to run directly in the ground connecting rod eye, obviating the need for an additional plain bearing. In conjunction with the low weight of the cast lightweight piston, this results in reduced oscillating masses.

The slide bearing for the lower connecting rod eye and the main camshaft bearing is also by no means typical of a single-cylinder engine, offering benefits in terms of space, weight and durability. A low-friction Nikasil coating of the sleeve for the cylinder integrated in the upper half of the engine housing highlights the fact that the BMW Motorrad engineers have endeavoured to combine lightweight construction and fuel efficiency with modern, groundbreaking engine technology.

### **Effective lubrication and cooling system for maximum reliability, even in adverse conditions.**

The vital supply of oil inside the engine is taken care of by a well-established wet sump lubrication system. Here there is a labyrinth of pans inside the oil sump that reliably counters any lack of lubrication during extreme riding manoeuvres. The liquid cooling system also ensures excellent thermal stability, even in very high outdoor temperatures. The coolant circulates through a generously sized radiator positioned underneath the steering head section.

### **6-speed gearbox, high maximum engine speed and counterbalance shaft for lively dynamic performance and excellent running smoothness.**

Power transmission is via a multi-plate wet clutch onto a well-graduated, constant-mesh 6-speed gearbox. The secondary drive to the rear wheel takes the form of an O-ring chain. With a spontaneous throttle response, lively

pulling power, full-blooded engine characteristics and a high maximum engine speed of 10 500 rpm, the all-new G 310 GS delivers very dynamic riding performance figures for excellent riding fun within its class. What is more, a rotating counterbalance shaft in front of the crankshaft effectively suppresses unpleasant vibrations, thereby ensuring a high level of running smoothness for the single-cylinder segment. Fitted with a closed-loop catalytic converter positioned on the intake side of the rear silencer, the BMW engine control BMS-E2 and a secondary air system make the engine of the all-new G 310 GS extremely environment-friendly and enables adherence to the EU4 emission standard.

The exhaust system has been redesigned for use in the G 310 GS. The manifold layout has been altered from that of the G 310 R roadster so as to do justice to the longer spring travel and the rear, while a newly conceived heat shield underscores the hallmark GS character of the all-new G 310 GS.

**Rigid tubular steel frame and long swinging arm for a high degree of ride stability, a precise steering response and light handling.**

Extremely compact and with the ability to handle a wide spectrum from comfortable touring and dynamic motorcycling along country roads through to off-road riding over gravel tracks and forest paths, the all-new BMW G 310 GS demonstrates mastery of the typical BMW GS repertoire which was hitherto not available in this segment. It enables nimble banking while remaining neutral and predictable at all times. And over lengthier distances it offers the necessary comfort combined with resilience – without any compromises in terms of ride stability on long drawn-on bends and fast passages. The high degree of ride stability, steering precision and manoeuvrability instantly establishes a sense of trust, even in motorcycle newcomers.

In terms of its suspension, the all-new G 310 GS is therefore similar to the G 310 R roadster in using a tubular steel frame in spaceframe structure with a bolt-on rear section that combines torsional stiffness with robust quality. For its use in the all-new G 310 GS, however, the frame has been fitted with new attachment points for the body components.

Given its good stiffness balance, this provides the basis for excellent ride stability and a precise steering response. The suspension geometry of the G 310 GS is designed for manoeuvrability, stability and a neutral cornering response both on and off the road, which makes for maximum riding fun and easy controllability as well as reflecting the bike's active riding character. The wheelbase is 1420 millimetres, the castor is 98 millimetres and the steering head angle is 63.3 degrees.

Due to the engine conception and arrangement, the single-section rear-wheel swinging arm made of die-cast aluminium is longer than in conventional designs, though without extending the wheelbase unnecessarily. With its generous length of 650 millimetres, it supports the bike's high level of neutrality, enables exemplary pitch compensation and makes load shift reactions much gentler. In this way, the all-new G 310 GS combines light-footed handling, riding precision and a high level of directional stability with benefits in terms of suspension and load shift response, too.

**Upside-down fork and directly mounted spring strut with long spring travel for a broad range of uses.**

The ride properties of the G 310 GS, characterised by nimble handling and a high level of stability, are supported by the balanced suspension/damper set-up of the directly mounted rear spring strut which is adjustable in the spring rest. The progressively wound spring distributes the spring rates in such a way that precisely the desired suspension resistance applies, depending on the position within spring travel: comfortable for everyday riding, with sufficient reserves when travelling in sporty style and tight enough when hard bumps or road hole edges challenge the reserves. For enhanced off-road capacity, the spring travel is 180 millimetres, a generous 49-millimetre increase over that of the G 310 R.

The appropriate counterpart to the control, suspension and damping of the rear wheel is to be found in the upside-down fork at the front. With a slider tube diameter of 41 millimetres and generously sized fork bridges made of light alloy, it forms a highly rigid composite structure for precise, stable control of the front wheel in the G 310 GS, thereby ensuring a secure and directly stable steering response. In conjunction with the perfect set-up of the rear end, it ensures a high level of ride comfort as well as suitability for a wide spectrum of uses – ranging from the most diverse road surfaces through to light, unsurfaced terrain. With a view to enabling forays off the beaten track, the spring travel has been increased by 40 millimetres as compared that of the G 310 R roadster to a total of 180 millimetres.

The all-new G 310 GS is fitted with 5-spoke light alloy die-cast wheels; the front wheel is 19 inches in size for a safe, dynamic riding response on a variety of different surfaces (G 310 R: 17-inch). Due to the larger wheel diameter, the wheel axis has been shifted forward in order to ensure an optimum, handling- friendly castor. As in the G 310 R, a 17-inch wheel is mounted on the rear. The tyre dimensions are 110/80 R 19 at front and 150/70 R 17 at rear.

### **High-performance brake system and ABS as standard for safe braking manoeuvres.**

Like all BMW motorcycles, the all-new G 310 GS comes with ABS as standard. It combines a high-performance brake system with a 2-channel ABS for efficient deceleration and short braking distances as well as efficient anti-locking – geared entirely towards optimum riding safety on poor or soiled roads. For use over light terrain, the ABS in the all-new G 310 GS can be conveniently deactivated at the press of a button on the left-hand handlebar panel if required.

At the front wheel, a single-disc brake with radially bolted 4-piston fixed caliper and a brake disc diameter of 300 millimetres ensures powerful and stable deceleration. At the rear, this function is performed by a 2-piston floating caliper in conjunction with a 240-millimetre brake disc. Steel-wrapped brake lines ensures stable pressure levels.

### **Hand lever adjustable in four stages for brake and clutch.**

Both, the clutch lever and the handbrake lever are now adjustable in four stages. It thus now provides ergonomic benefits – particularly for people with small hands. Stage 3 of the brake lever adjustment corresponds to the grip width until now. In the 1st position the brake lever is 6 mm closer to the handlebar.

### **Perfectly designed BMW GS ergonomics for relaxed motorcycling fun on the road and over light terrain.**

The all-new G 310 GS provides a relaxed seating position which enables carefree motorcycling pleasure both on the road and during excursions along gravel tracks and forest paths. As is characteristic of BMW Motorrad, all switches and controls are simple and secure to handle. Great importance was attached to simple and safe operation, taking into account the most diverse rider anatomies. The design of the ergonomic triangle consisting of handlebars, footrests and seat ensures excellent control while also providing very sound and comfortable feedback from the contact surfaces on the fuel tank and seat. At higher speeds, the standard windshield also relieves the rider's upper body from the force of the airstream as well as ensuring an even flow of wind at the helmet

The all-new BMW G 310 GS meets the demands of a purebred BMW GS with tubular handlebars that are slightly wider and angled further to the rear than in the G 310 R. As in the “big” BMW GS models, rider footrests with a jagged profile and mounted directly on the frame ensure a sure-footed ride even in adverse conditions. The passenger's feet have a secure foothold on passenger footrests that are mounted on tubular steel arms.

The comparatively moderate seat height of just 835 millimetres and the short inside leg length mean that virtually any motorcyclist will feel comfortable on the G 310 GS – whether riding on the road or on short detours over unsurfaced terrain. Meanwhile shorter or taller riders can draw on the range of Original BMW Motorrad Accessories to select a lower seat variant with a height of 820 millimetres or else a higher, particularly comfortable seat at 850 millimetres.

**Multifunction instrument panel with a range of features.**

Like the G 310 R roadster, the all-new G 310 GS has an instrument cluster with a large LC screen that offers excellent readability and a wide variety of information. The displays include the following: engine speed, road speed, gear, total kilometres, engine temperature, fuel tank level, remaining range, average fuel consumption, average speed, time.

**New LED headlight and LED flashing turn indicators – seeing and being seen optimally.**

Whereas the BMW G 310 GS was already equipped with brake lights in LED technology, the new BMW G 310 GS now has a full-LED headlight for even better visibility at night and LED flashing turn indicators for increased visibility in traffic. The new LED headlight not only ensures particularly bright and homogeneous illumination of the road. Due to the modified connection, distracting vibrations of the light cone are a thing of the past. The three light functions high beam, low beam and, depending on the country, daytime driving light can be conveniently operated using the left handlebar controls.

### 3. Design and colour concept.



#### **A genuine GS – also in terms of design.**

The BMW G 310 GS presents its own distinct interpretation of numerous features that are also to be found in its sibling models, making it instantly recognisable as a member of the GS family. With its characteristic windshield, the high front fender, striking flyline and short, high rear, the BMW G 310 GS has classic elements of its larger GS sibling models. The engine of the BMW G 310 GS has an innovative installation geometry that makes for very compact proportions and a short wheelbase – ideal for manoeuvring within limited traffic space in cities. The 19-inch front wheel and the extended spring travel make for a typical upright posture, promising an agile, nimble riding response. The short, high rear gives the entire rear section a light, airy appearance. At the same time it shifts the visual focus to the front, thereby further emphasising the bike's balanced proportions.

#### **Expressive, functional surface finishes.**

The coloured areas in the upper area trace the typical GS flyline that runs from the front fender across the fuel tank to the seat – something that has become a virtually iconic characteristic. A small windshield provides aerodynamic protection. Below this, two frame outlines provide a surround for the headlamp mask. The high position of the intake area, the striking styling, the separation of materials by colour and the silver trim elements with BMW logo create a visual distinction between the motorcycle body and technology, as in the larger sibling models. Painted surfaces give the side a high-quality, self-contained appearance, while the large proportion of high-quality grained plastic highlights the robust character of the BMW G 310 GS. As in the larger sibling models, the powerfully expressive surfaces are deliberately designed for functional purposes, too: each shape and surface and their respective material has been selected to ensure the BMW G 310 GS provides optimum usability.

#### **Luggage bridge as standard.**

Every GS has a high-quality luggage bridge. This comes as standard in the BMW G 310 GS, combining a striking shape with optimum functional effectiveness. As a stable base for topcases or larger luggage items, it enormously extends the practicality and versatility of the BMW G 310 GS in everyday use.

### **Exclusive highlights.**

The uncompromising striving for quality and sophisticated solutions shows the high standards of BMW Motorrad in creating the BMW G 310 GS. It thus offers identical quality to the larger-capacity BMW Motorrad models, reflected down to the last detail in gap patterns, design realisation and component joints. In addition there are exclusive highlights such as the standard upside- down fork with slider tubes finished in gold and the likewise gold-coloured brake calipers and rear swinging arm. The aluminium swinging arm with detailed modelling and lattice-like design conveys lightness and stability. Matching this, the light alloy wheel rims with 5-spoke turbine design give the side view a dynamic look.

### **Visual and ergonomic details from the rider's perspective.**

Seen from the top, too, the BMW G310 GS looks more like a model belonging to a larger capacity segment. The characteristic beak runs as a band of colour emerging from the headlamp mask across the fuel tank to the side trim, making the BMW G 310 GS instantly recognisable as a GS even from a bird's- eye perspective. The powerful surfaces of the fuel tank give it a clearly defined, muscular look. At the same time, the striking surface styling of the fuel tank allows for a maximum steering angle and therefore excellent manoeuvrability in tight spaces.

### **Exclusive fork bridge and fully digital instrument cluster.**

The strikingly shaped aluminium fork bridge is particularly conspicuous from the rider's perspective. It is elaborately modelled and interprets the style of the footrests and rear wheel swinging arm in its own distinct form. This high-quality detail is rounded off with an embossed BMW inscription on the upper clamp. Above this, all relevant information is shown on the clearly readable LCD screen. The modern character of the BMW G 310 GS is further reflected in the fully digital display of information.

### **Individualisation through variety of colours and materials.**

GS is a promise at BMW Motorrad. It stands for absolute functionality, reliability and robustness. Accordingly, the new BMW G 310 GS can be recognised at first glance as a genuine BMW GS. With its characteristic windscreen, high front fender, striking flyline and short, high rear end, it has the main elements of the large BMW R 1250 GS models – and has an even more aggressive and dynamic appearance from the front thanks to the new LED headlight.

Its colour concept also reflects that it is part of the BMW GS family. What all three colour variants of the BMW G 310 GS have in common are the engine housing covers for the alternator, clutch and water pump, now painted in metallic titanium grey.

In addition to the typical GS colours in white with the basic colour plain polar white and tank side panels in grey, the new BMW G 310 GS has a very sporty appearance in Rallye style. The frame painted red and Kyanit blue metallic for the tank centre cover and front emphasise the off-road talents and give the motorcycle an extremely dynamic appearance.

As the "40 Years GS" edition, however, the BMW G 310 GS is based on a famous historical model from the BMW GS history - the R 100 GS. Accordingly, it is in black and yellow - with the basic colour cosmic black and yellow graphics on the tank side panels.

## 5. Production and quality.



An individually harmonised range of BMW Motorrad optional accessories is provided which perfectly match the overall concept of the G 310 GS.

Optional accessories are installed by the BMW Motorrad dealer or by customers themselves. These are features which can be retrofitted, too.

### **Optional accessories.**

- Low seat.
- High seat.
- 29-litre topcase "Basic" with retaining plate.
- 30-litre topcase.
- LED turn indicators.
- 12-volt socket.
- Liner for topcase.
- Tank rucksack.

## 5. Production and quality.



**Developed in Munich by BMW Motorrad – produced in Hosur, India by the cooperation partner TVS Motor Company.**

The all-new BMW G 310 GS is produced in Hosur, India by the BMW Motorrad cooperation partner TVS Motor Company,

India's third largest motorcycle manufacturer with a production volume of some 2.5 million vehicles per year. The company has been committed to sustainability for many years and attaches great importance to adhering to defined social and environmental standards which go far beyond what is common practice in India.

TVS Motor Company is the flagship of the TVS Group, which is made up of more than 90 companies in total. These include numerous firms that enjoy an excellent reputation in the automotive sector as suppliers for well-known car makers. Many of these suppliers from within the TVS Group provide the components for the G 310 GS.

**Quality management and state-of-the-art production following the standards of the BMW Motorrad plant in Berlin-Spandau.**

TVS Motor Company's quality management system has been based on Japanese role models for many years. For the G 310 GS, this system was extended to include the requirements and standards specific to BMW Motorrad, and within the area of quality management there are interdisciplinary teams from both companies working in close collaboration.

An exclusive production area has been set aside in the factory for production of the G 310 GS. Mechanical production of the engine components is carried out on new, high-quality machine tools made by leading German manufacturers. BMW Motorrad was closely involved in an advisory capacity here and production is set up based on the model of the BMW Motorrad plant in Berlin-Spandau. The engine assembly line is completely new and fitted with cutting-edge automation and testing technology for every stage of the process. All the relevant work stages are monitored and automatically recorded with regard to size accuracy, tolerances and bolt-fitting values. Assembly is carried out in a completely sealed, glazed area which can only be accessed via air locks so as to prevent any dirt from entering. At the end of the

engine assembly line, each engine is put through a test bench run where all relevant parameters are measured including output.

Vehicle assembly is also carried out in a dedicated section of the factory reserved exclusively for BMW Motorrad. Here again, state-of-the-art assembly technology is deployed. The final inspection is performed according to BMW Motorrad standards and includes electronic functional testing as well as a final run on the roller test bench for every motorcycle. The roller test bench is also completely new and set up according to Berlin standards.

Furthermore, staff were specially selected and trained by TVS for production and assembly. Additional training programs were held for assembly workers together with colleagues from the BMW Motorrad plant in Berlin-Spandau over a period of more than a year prior to the start of serial production. From the very first vehicle to come off the production line in India, they have also contributed to the high assembly standards and heightened quality awareness. All in all, production of the all-new BMW G 310 GS is subject to the same quality criteria that apply to production at the BMW Motorrad plant in Berlin-Spandau.

## 5. Technical specifications.



| BMW G 310 GS                     |   |  |
|----------------------------------|---|--|
| Engine                           |   |  |
| Displacement                     | cm <sup>3</sup>   | 313  |
| Bore/Stroke                      | mm  | 80/62.1  |
| Power                            | kW/HP   | 25/34  |
| at rotational speed              | rpm   | 9500   |
| Torque                           | Nm  | 28   |
| at rotational speed              | rpm   | 7500   |
| Design                           | Water-cooled single-cylinder four-stroke engine, four valves per cylinder, rocker arm-confirmed, two overhead camshafts and one counterbalance shaft, wet-sump lubrication, e-throttle grip |  |
| Number of cylinders              |   | 1  |
| Compression/Fuel                 |   | 10.6:1   |
| Valve/Throttle control           |   | DOHC   |
| Valves per cylinder              |   | 4  |
| Ø intake/exhaust                 | mm  | 33.5/27.2  |
| Ø throttle valves                | mm  | 42   |
| Engine control unit              | Electronic injection BMS-E2   |  |
| Emission control                 | 3-way closed-loop catalytic converter, emission standard BS-VI  |  |
|                                  |   |  |
| Electrical system                |   |  |
| Alternator                       | W   | 330  |
| Battery                          | V/Ah  | 12/8   |
| Headlight                        | W   | LED  |
| Starter                          | kW  | 0.5  |
|                                  |   |  |
| Power transmission, transmission |   |  |
| Clutch                           | Self-boosting multi-disc clutch in oil bath, mechanically actuated  |  |
| Transmission                     | Claw-shifted six-speed transmission, integrated in the engine housing   |  |
| Primary translation              |   | 3.083  |
| Translation ratios               | I   | 3.000  |
|                                  | II  | 2.063  |
|                                  | III   | 1.588  |
|                                  | IV  | 1.286  |
|                                  | V   | 1.095  |
|                                  | VI  | 0.955  |
| Final drive                      | Endless Z-ring chain, judder damper in the rear wheel hub   |  |
|                                  |   |  |
|                                  |   |  |
| BMW G 310 GS                     |   |  |
| Chassis                          |   |  |
| Frame design                     | Tubular spaceframe  |  |
| Wheel guide, front wheel         | Upside-down fork Ø 41mm   |  |
| Wheel guide, rear wheel          | Drawn die-cast aluminium, directly hinged central spring strut, spring base adjustable  |  |
| Spring travel, front/rear        | mm  | 180/180  |
| After-run                        | mm  | 98   |
| Wheelbase                        | mm  | 1,420  |
| Steering head angle              | °   | 63.3   |
| Brakes                           | front   | Single-disc brake Ø 300 mm, 4-piston radial brake calliper |
|                                  | rear  | Single-disc brake Ø 240 mm, 1-piston floating calliper     |
| ABS                              | BMW Motorrad ABS  |  |
| Wheels                           | Cast aluminium wheels   |  |

|       |       |             |
|-------|-------|-------------|
|       | front | 2.50 x 19"  |
|       | rear  | 4.0 x 17"   |
| Tyres | front | 110/80 R 19 |
|       | rear  | 150/70 R 17 |

#### Dimensions and weights

|  |    |       |
|--|----|-------|
| Overall length   | mm | 2,075 |
| Total width (across hand lever)                              | mm | 880   |
| Seat height at vehicle kerb weight                           | mm | 835   |
| DIN vehicle kerb weight, fully fuelled and ready for driving | kg | 169.5 |
| Perm. total weight   | kg | 345   |
| Fuel tank capacity   | l  | 11    |

#### Driving data

|                         |          |      |
|-------------------------|----------|------|
| Fuel consumption (WMTC) | l/100 km | 3.33 |
| Maximum speed           | km/h     | 143  |