

BMW Group

Corporate and Governmental Affairs

Media Information
03 June 2009

The BMW 700. The car that saved the Company

Munich. Things did not look good. Indeed, BMW was rapidly approaching the final collapse and demise of the Company in the 1950s: While motorcycle production had reached a new record in 1952, production figures decreased more significantly in the years to come than they had increased in the late '40s.

To set off this dismal end of the motorcycle market, BMW built the prototype of a new small car in 1950, taking up the lines of the pre-war BMW 327 and the 600-cc flat-twin engine so popular at the time. But the project was subsequently discarded for economic reasons.

After launching the Isetta in 1954 in an attempt to set off the slump in the motorcycle market, BMW soon realised that this bubble car was too small for the new customers entering the market, who, as a result of the German "economic miracle" soon expected a lot more of their new car in the late '50s. Quite simply, therefore, such spartan "super-minis" had already passed their climax, with customers demanding a longer wheelbase and more comfort.

At the same time the automotive industry was booming, with production in West Germany increasing by one-third in 1955 alone. Introducing new models, BMW sought to jump up on the bandwagon, the BMW 600, a somewhat longer Isetta with its flat-twin engine fitted at the rear, intended to meet demand for a genuine four-seater at least for a while as of 1957. But again, the BMW 600 turned out to be a flop, customers not accepting the concept with the door at the front of the car.

Looking hard for a solution, the Development Division initially attempted for economic reasons to build a conventional small car using as many parts of the BMW 600 as possible. Wheelbase was extended to 1,900 mm or 74.8" by adding on extra sections front and rear, and the front seats were moved back to provide convenient access to the car from behind the wheel arches. But soon it became evident that without a further extension of the car's wheelbase space for the rear seats would be very limited. At the same time the rapid increase in weight resulting from the car's longer wheelbase was another problem, together with the poor seating arrangement.

The attempt to modify the frame and structure of the BMW 600 and meet modern demands thus proved to be impossible – or at least subject to significant compromises. So instead BMW decided to find a more promising solution by re-configuring the entire design and structure of the body.

Proven chassis and suspension carried over from the BMW 600.

Notwithstanding this decision, BMW's engineers did not want to completely give up the proven parts and components of the BMW 600 in developing their new model. So they decided to modify the front axle of the BMW 600 with its longitudinal swing arms for consistent track and wheel camber and carry over

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the concept to BMW's new small car – naturally with appropriate reinforcements to meet the greater demands made of the new model.

The engineers also took over the rear wheel suspension which, with its swing arms modified to a slightly higher angle, supported the car's steering as a function of acceleration in bends and counteracted any tendency to oversteer. Further features carried over from the BMW 600 were the all-synchromesh four-speed transmission as well as the bevel gear differential – and, of course, the flat-twin power unit originally used on BMW motorcycles and now increased in size from 600 to 700 cc.

The crucial point was now to wrap up this technology in an appropriate body suitable both for the market and the requirements of the future. Back in late 1957, that is before the BMW 600 entered the market, BMW's new Board of Management had already requested the Development Division to develop and build a conventional small car with progressive design in corporation with an Italian designer and coachbuilder.

In July 1958 Wolfgang Denzel, an automotive engineer himself and BMW's importer in Vienna, proudly presented his new model designed by Michelotti in Starnberg just south of Munich. The decision in favour of this concept model was then taken in October 1958, allowing BMW to create both a Coupé and a Saloon to series production level as an in-house development.

The reason for doing this in-house was that the prototype, while being very attractive and offering excellent driving qualities, would have been uneconomical in production due to the expensive tooling required. So working hard on all the details, BMW's designers developed a dynamic little car which had nothing to do with BMW design so far: the BMW 700.

In its design the BMW 700 followed a trapezoid line with the roof structure and the basic body of the car opposed to one another to form two counter-flowing bodies. This design concept came from the USA as a streamlined rendition of the former pontoon structure, with further refinement by Italian car designers.

Under the guidance of Wilhelm Hofmeister, BMW's designers then turned this draft into two models, a two-door Saloon and a Coupé.

The first BMW with a monocoque body.

Apart from its brand-new design, the BMW 700 offered another surprising highlight: it was the first BMW with a monocoque body. And the reason for introducing this new technology was clear: "They might believe initially that in this way we were giving up an old principle going back many years within the Company. But our calculators quickly showed us that a monocoque floorpan was able to save about 30 kg in weight, lower the entire car by 60–70 mm



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(2.4–2.8") and streamline the production process, with appropriate cost benefits."

BMW was not a newcomer to the use of monocoque unitary body panels. On the contrary, the BMW 326 built in Eisenach from 1936 until the beginning of the War already featured a floorpan made of high-rising panel supports firmly welded to the body of the car – at the time the best solution for a load-bearing body structure.

This experience carried over from the past quickly paid off, a comparison with two other well-known cars of the same size built in Europe and with a monocoque body clearly confirming the superior stiffness of BMW's car structure.

On 9 June 1959 BMW's Board of Management under their Chief Executive Dr Heinrich Richter-Brohm made the big move, presenting the new BMW 700 Coupé, the first model in the new series, to some 100 international motoring journalists. This was in Feldafing near Munich, at the same place where about two years before they had first seen the not-so-fortunate BMW 600.

Since the turbulence encountered in BMW's model range had added further momentum to the critical reports by the press, Helmut Werner Bönsch, BMW's Director of Technical Sales Planning, admitted quite frankly in his welcome statement that "ultimately it was this attitude and these doubts which convinced us to invite you here today to experience the new BMW 700 Coupé, and not to wait until the Frankfurt Motor Show."

The debut: standing ovations.

The minute Bönsch revealed the new Coupé, everybody started clapping. The journalists immediately admired the new model with its wheelbase of 2,120 mm (83.5"), front track of 1,270 mm (50.0") and rear track measuring 1,200 mm (47.2").

Boasting these dimensions, the BMW 700 had grown out of the small car class still prevailing in the market at the time and allowed a relatively high standard of freedom in providing extra space. The designers and engineers were particularly proud of the car's consistent lightweight technology reducing dry weight to less than 600 kg or 1,323 lb despite the car's overall length 3,540 mm or 139.4", thus providing the qualities required for good acceleration and hill-climbing performance.

Compared with the BMW 600, the extension in wheelbase by 25 per cent came with an increase in weight by only 14.5 per cent. And despite its low height of just 1,270 mm or 50.0", the Coupé offered acceptable headroom just like the doors measuring 93 cm or 36.6" in width allowed unusually comfortable access



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for a car in this class.

Enjoying the seats, the driver and passengers in the BMW 700 benefited from an unusually good balance of useful interior space and exterior dimensions, the curved windows helping to keep the doors smooth and provide extra width inside the car.

Again in the words of Helmut Werner Bönsch: "In combining the footwells and the luggage compartment we followed the example of a modern sleeping car – which shows that sometimes you can even learn from the railways!" He then added that "we also remembered to keep the four corners of the car in clear sight from the driver's seat, allowing the driver to easily manoeuvre even into tight parking spaces."

Appropriately contoured to fit the human body, the front seats with their active-breathing upholstery were adjustable even while driving and came with backrests moving to four different angles. The backrest at the rear, in turn, folded down whenever required like in the BMW 600, allowing the driver and passengers to take along bulky objects such as all their camping gear.

Same space and dynamic performance as the BMW 326.

The BMW 700 was also well-equipped for travelling with a fair amount of luggage. The front luggage compartment with its conveniently fl at floor was able to accommodate two standard-sized suitcases measuring 70 cm or 27.5" in length, together with some smaller bags. The fuel tank was beneath the luggage compartment, perfectly protected by the spare wheel standing upright in front. Offering a capacity of 30 litres or 6.6 imp gals plus three litres reserve, the tank was sufficient for a cruising range of approximately 500 kilometres or more than 300 miles, since, according to the fuel consumption standards applicable at the time, the BMW 700 was quite happy with some six litres for 100 kilometres, equal to approximately 47 mpg imp.

Developing maximum output of 30 hp at 5,000 rpm, the two-cylinder power unit was able to accelerate the Coupé to a top speed of 125 km/h or 78 mph. Exactly what this meant in terms of performance became quite clear in a statement again made by Helmut Werner Bönsch, comparing the car's performance with that of the legendary BMW 327 touring sports car: "The BMW 700 Coupé with its 700-cc 30-hp two-cylinder offers the same top speed, the same acceleration and the same safe average speed on the road as its legendary predecessor with its two-litre six-cylinder two-carburettor power unit. And it does so with the same space inside and with superior roadholding of an even higher standard."

Journalists driving the BMW 700 Coupé were – rightly – thrilled from the start, waxing lyrical about the car's design and its driving qualities: "Acceleration is certainly impressive for a car of this size, taking you from a standstill to 90 km/h in 20 and to 100 km/h in 30 seconds."



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With this kind of performance, some journalists realised from the start that the BMW 700 Coupé was already looking at a sporting career: "You have the feeling that you're sitting in a car with genuine sporting values, but without the rather harsh ride and limited space so typical of most sports cars."

Ultimately, most of the testers readily confirmed the optimism expressed by BMW's Board of Management: "The BMW 700 Coupé is the latest model from Bayerische Motoren Werke and promises to be a great success and a real highlight at this year's Frankfurt Motor Show."

Public attractions at the 1959 Frankfurt Motor Show: the BMW 700 Saloon and Coupé.

Precisely this is what happened, with the BMW 700 becoming a genuine highlight for the public in Frankfurt. The new Coupé was presented on the BMW stand at the 1959 Frankfurt Show at a price of DM 5,300.– including the car's heater. Right next to it was the four-seater Saloon based on the same engineering and design concept and destined to enter series production in early 1960.

Retailing at a price of DM 4,760.–, the Saloon was almost DM 600.– cheaper than the Coupé with its higher level of equipment. At the same time the Saloon boasted a far more spacious body offering adequate space for four adults. And unlike the Coupé with its fl air almost reminiscent of a sports car, the Saloon stood out in particular through its practical features and benefits.

Likewise designed by Torino coachbuilder Giovanni Michelotti, the Saloon also received its finishing touches in BMW's Design Office under Wilhelm Hofmeister.

With its steeper windscreen and rear window as well as the modified roof, the Saloon, on a body otherwise identical, looked much larger than the dynamic Coupé. But weighing just 10 kilos more than the Coupé, the 640-kg (1,411 lb) Saloon was able to offer almost the same good performance, accelerating to 100 km/h in approximately 30 seconds and reaching a top speed of 120 km/h or 75 mph.

With the Frankfurt Motor Show hardly over, BMW struck a very positive balance towards the end of September: "Both new models were warmly welcomed by motor journalists and the public alike, showing a response well beyond even our most optimistic expectations. As a result, we successfully made an unusually large number of sales not only in Germany, but also and above all in our export markets."

The BMW 700 was the direct competitor of the initially cheaper VW Beetle and appealed above all to the motorist wishing to stand out from the crowd.



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Indeed, as a result of great demand customers had to wait several months for the delivery of their car, with BMW selling more than 35,000 units in 1960, the BMW 700 thus accounting for some 58 per cent of the Company's overall revenues.

Born for motorsport: the BMW 700 Coupé.

The sporting qualities of the BMW 700 Coupé came out quite clearly from the start, shortly after the beginning of production in July 1959: The first Coupés were to be admired on the track before the end of the year, for example in the Sahara-Lapland Rally. In 1960 BMW's fast Coupés brought home both gold medals and titles, Hans Stuck clinching the German Hill-Climbing Championship once again at the wheel of a BMW 700 at the age of 60.

This clearly created significant demand among many customers for an even more powerful engine, with the big day coming in summer 1961, when BMW proudly presented the BMW 700 Sport to the press at the Nürburgring Race Track.

With its compression ratio increased to 9:1, an even more dynamic camshaft and Solex twin-carburetors supplying the fuel, the two-cylinder boxer engine now developed 40 hp at 5,700 rpm.

This sporting package was rounded off by an optional sports gearbox and an even harder suspension featuring firmer dampers and an anti-roll torsion bar. The power unit, in turn, was sufficient for acceleration to 100 km/h in just under 20 seconds and a top speed of 135 km/h or 84 mph.

All the customer had to pay for this extra driving pleasure was DM 550.–.

This "hot" version of the BMW 700 quickly became a legend in the early '60s particularly in motorsport, and was lauded by fans as the "little fighter". And indeed, at its time the car put up some exciting duels against competitors from both Steyr-Puch and Abarth.

Racing machine with a tubular spaceframe and an aluminium body: the BMW 700 RS.

Moving on to works racing, BMW prepared two truly outstanding performers parallel to one another: the 700 GT in 1960 and, a year later, the BMW 700 RS. "When a new BMW sports car, the BMW 700 RS enters the Rossfeld Hillclimb Race on 18 June 1961, this will be in a quest to test the driving qualities of the BMW 700 at higher speeds and under more dynamic conditions," said the announcement.

The fact that this was indeed no more than a test is obvious, considering that the BMW 700 RS, in making its debut in the sports car category up to 1600-cc, was competing against the likes of the Porsche Spyder and the Porsche RSK,



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to mention only two formidable rivals.

BMW's small racing machine boasted a tubular spaceframe and an aluminium body, with 70 hp coming from the side-shaft power unit and with the complete vehicle weighing less than 600 kg or 1,323 lb. Depending on the transmission ratio, this small but dynamic performer was able to reach a top speed between 150 and 200 km/h (93 and 124 mph) – enough for Walter Schneider to bring home the German Circuit Championship in 1961 at the wheel of a BMW 700 RS.

The dynamic BMW 700 remained seriously competitive and in most cases even superior for years to come, boasting various levels of tuning and engine power. And when BMW's two-cylinder sports car finally reached the end of its career, Hubert Hahne, one of the big stars at the time in touring car racing, had brought home the majority of his wins in this outstanding performance model.

At the same time the BMW 700 had already become the ideal car for young drivers making their first appearance in racing at the time. A very good example is Hans-Joachim Stuck, who has great memories of this great car: "I was just nine years old when I accompanied my father to drivers' courses held by Scuderia Hanseat at the Nürburgring race track. And there I was able to drive a BMW 700 myself, since it was a closed circuit reserved entirely for our racing activities."

BMW quickly added further versions to the range, making the BMW 700 even more successful: Following the regular BMW 700, the Company introduced the BMW 700 De Luxe in February 1961, featuring the same technical equipment but with an even higher level of appointments. The most exclusive model in the BMW 700 range launched at the same time was the BMW 700 Convertible, the Baur Coachbuilding Company in Stuttgart designing and building this open-air version of the BMW 700, as they had already done so often in the history of BMW.

To provide all the qualities for driving in the open air, Baur reinforced the car's load-bearing elements and re-designed the rear end. An uncomplicated, straightforward roof mechanism made open air motoring a genuine pleasure, particularly because the 700 Convertible came as standard with the more powerful engine otherwise featured in the BMW 700 Sport.

1962: new generation for greater comfort.

The most significant change came in spring 1962 when BMW, while retaining the car's wheelbase, extended the body by no less than 32 cm or 12.6" in order to offer a significant increase in motoring comfort.

This new model was marketed as the BMW LS and the BMW LS De Luxe. As of autumn 1964 the Coupé also received this longer body, coming off the assembly line in its last year of production as the BMW LS Coupé.



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In all, sales of the BMW 700 amounted to 190,000 units by the year 1965. And the car was a great success in many countries the world over, with BMW delivering assembly kits for the BMW 700 to assembly plants in countries otherwise imposing high taxes on completely built-up cars. Hence, the BMW 700 was assembled from kits in Belgium, Italy, Argentina and even – in small numbers – in Israel.

At the end of the day the BMW 700 more than fulfilled its expectations, having given BMW new hope and taking the Company successfully through the crisis in 1959 and on to the final breakthrough to profitable large-scale production.

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