Press information
August 25, 2025

CONCEPT AMG GT XX redefines performance: Technology pioneer shatters records and drives "around the world in eight days"

- 5,479 km (3,404 mi) in 24 hours: CONCEPT AMG GT XX obliterates the previous 24-hour record with over 1,500 km (932 mi) to spare
- “Around the world in eight days”: The concept vehicle sprints 40,075 km (24,901 mi) in 7 days, 13 hours, 24 minutes and 07 seconds – the equivalent of the Earth’s circumference at the equator
- Production-ready technology: Axial flux motors and liquid-cooled battery from the upcoming high-performance AMG.EA architecture prove unmatched endurance capabilities under extreme conditions
- Record-breaking streak: CONCEPT AMG GT XX sets a total of 25 performance records, averaging over 5,300 km (3,293 mi) per day – most of it at 300 km/h (186 mph)
- Ultra-fast charging: Extremely short charging times with an average charging power of around 850 kW – far beyond what today's infrastructure can deliver

Affalterbach/Nardò. With the CONCEPT AMG GT XX, Mercedes-AMG sets new benchmarks and continues the brand’s decades-long tradition of relentlessly pushing the boundaries of automotive engineering. From historic motorsport triumphs to legendary records on race and test tracks, the performance brand from Affalterbach has always stood for the pursuit of ultimate performance. Mercedes-AMG reaffirmed this commitment just last year with the lap record of the Mercedes-AMG ONE on the Nürburgring-Nordschleife. Since October 2022, the hypercar has remained the fastest production vehicle ever on the iconic circuit – having even beaten its own record.

Now, the CONCEPT AMG GT XX builds on this proud legacy and delivers a powerful demonstration of the superior performance of the upcoming high-performance AMG.EA architecture. The technology pioneer is powered by revolutionary drivetrain technologies set to enter production next year with AMG.EA. Featuring three axial-flux motors and a directly cooled high-performance battery, the concept vehicle promises a new dimension of power and endurance. Mercedes-AMG has now proven this under extreme conditions – the ultimate test evoking the record runs of the past, powered by the technology of tomorrow.

On the legendary high-speed test track in Nardò, Italy – a site where the world’s fastest cars have been put to the test for decades – the CONCEPT AMG GT XX broke a total of 25 long-distance records. Among them was the record for the greatest distance ever covered by an electric vehicle within 24 hours. The previous record was under 4,000 km (2,485 mi), which the CONCEPT AMG GT XX has far surpassed. The technology platform traveled 5,479 km (3,404 mi) in 24 hours – 1,518 km (943 mi) more or approximately 38 percent further than the previous record.

But this was just one of many records that the CONCEPT AMG GT XX secured with a commanding lead. The technology pioneer’s extreme test lasted far longer than 24 hours. The goal: to drive “around the world in

eight days" – a mission to prove the superior long-distance performance of the AMG electric drivetrain. The name of the challenge? A nod to Jules Verne's "Around the World in 80 Days."

The record run followed an exceptionally demanding schedule. The greatest strain on motors and battery occurs under high-load driving and high-speed charging cycles. To simulate this scenario repeatedly, the CONCEPT AMG GT XX was tasked with covering as long of a distance as possible in the shortest possible time. Drivers maintained a constant speed of 300 km/h (186 mph), stopping only to recharge at power levels averaging around 850 kW – far beyond what today's charging infrastructure can provide. This once again underscores the future-proof capabilities of this production-ready drivetrain. After each charging stop, the vehicle accelerated back to 300 km/h (186 mph) – over and over, day and night, for eight relentless days.

Although capable of significantly higher speeds, the vehicle's pace was deliberately set by the engineers based on extensive simulations. According to these analyses, the 300-km/h (186-mph) speed offered the optimal balance between track speed and charging stops, delivering the fastest overall time.

In the early morning of August 25, 2025, the moment finally arrived. The distance of 40,075 km (24,901 mi) was covered in exactly 7 days, 13 hours, 24 minutes and 7 seconds – beating its own target of eight days by a wide margin. Along the way, the CONCEPT AMG GT XX set a number of additional performance records (see table below) and even pushed on to reach yet another milestone at 25,000 miles.

It wasn't just one CONCEPT AMG GT XX that mastered the extremely demanding marathon program – but two. Both vehicles set off simultaneously on the record-breaking drive and delivered a compelling demonstration of endurance. After more than seven and a half days of operation and a full circumnavigation of the globe each, they crossed the finish line just 25 km (15.5 mi) apart – the equivalent of barely two laps on the Nardò proving ground. Completing this around-the-world challenge twice within eight days underscores the exceptional long-term performance capability of the powertrain.

The relentless program required 3,177 laps of the 12.68-km (7.88-mi) Nardò circuit. Experienced race drivers completed two-hour shifts in the seemingly endless round-the-clock race. On average, the CONCEPT AMG GT XX drove more than 5,300 km (3,293 mi) per day. Conditions were also far from favorable. During the day, ambient temperatures rose up to 95 degrees Fahrenheit (35 degrees Celsius) in the shade – climbing even higher under direct sunlight on the exposed track. Yet the car's revolutionary powertrain delivered flawless performance throughout.

The test was not only a feat of technology, but also of teamwork. From the pit crew handling charging and tire changes, to the round-the-clock provision of fire and rescue services to the remote support room in Affalterbach, which was permanently connected to Nardò via remote diagnostics. External specialists – including tire supplier Michelin and charging station specialist Alpitronic – rounded off the expert crew.

"Mercedes-AMG and Formula 1 stand for innovation, intense competition, and pushing the boundaries of what is technically possible. Our company's powertrains achieved groundbreaking successes in the very first road races in automotive history more than 120 years ago and have set benchmarks for decades. In the 1970s and 1980s, Mercedes-Benz was a regular guest here at Nardò, setting numerous international speed and track records - most notably with the C111 as a visionary technology program. Back then, we demonstrated the performance capabilities of innovative diesel and gasoline powertrains. Now, with the CONCEPT AMG GT XX technology program, we are entering a new dimension of performance – this time with fully electric drive. The goal is to redefine the limits of what is technically possible in the age of electric drives. So what could be more fitting than to chase records once again? Our mission: to redefine the very standards of performance with groundbreaking technologies and innovations. The motivation and

dedication of the cross-functional team from Mercedes-AMG, Mercedes-Benz, Mercedes-Benz Mobility and our F1 engine experts at Mercedes-AMG High Performance Powertrains throughout the entire preparation phase were boundless. I am immensely proud of the unprecedented achievement of the entire team in this unique record drive."

Markus Schäfer, Member of the Board of Management of Mercedes-Benz Group AG. Chief Technology Officer, Development & Purchasing

"An AMG has always been defined by its drivetrain. In the electric world, too, our drive system must be convincing across the board. That's why we're the first manufacturer to use axial flux motors and directly cooled batteries in fully electric models. We have now impressively demonstrated how superior these technologies are. Enormous performance and extremely fast charging were always available and made these records possible. For customers of our future electric models, this means they will get a genuine AMG – no ifs, ands or buts. My heartfelt thanks go to the entire team – we're delighted that we can also count on the best team in the automotive industry when it comes to electric performance."

Michael Schiebe, Chairman of the Board of Management of Mercedes-AMG GmbH and Head of Mercedes-Benz G-Class & Mercedes-Maybach divisions at Mercedes-Maybach

"As an F1 driver, I'm used to pushing technology to its absolute limits – the CONCEPT AMG GT XX really impressed me. The axial flux motors respond as immediately and precisely as a Formula 1 drivetrain, but with an endurance that I have only ever experienced with combustion engines. This technology will revolutionize the driving experience – both on the racetrack and on the road."

George Russell, Mercedes-AMG PETRONAS F1 team driver

A new dimension in electric endurance

The revolutionary drive concept with three innovative axial flux motors and a high-performance battery developed from scratch enabled a new dimension of continuous electric power and ultra-fast charging. This meant that the CONCEPT AMG GT XX could be pushed to its limits time and again during testing at Nardò, delivering a new level of continuous performance that was previously almost unthinkable in the world of electric vehicles. Even under extreme driving conditions, the batteries remained within an optimum temperature range – which not only ensured performance on the track but also enabled extremely fast charging.

Added to this are the axial flux motors, which are considerably more compact and lighter but above all significantly more powerful than conventional electric motors. The power density of axial flux motors is around three times higher. This enables top-level driving performance that can be reproduced very frequently and repeatedly.

Three axial flux motors and a directly cooled battery concept

The CONCEPT AMG GT XX generates a peak output of over 1,000 kW (>1,341 hp). This output is achieved by the three innovative motors integrated into high-performance electric drive units (HP.EDU) on the front and rear axles. The rear axle has two oil-cooled axial flux motors, which are combined with compact transmissions and one inverter each in a single housing. The front electric drive acts as a booster motor and is only activated when needed to provide additional power or traction.

Axial-flux motors offer enormous advantages over conventional electric motors. These are significantly more powerful while also being lighter and more compact. Its power density is roughly three times higher, while weighing less and requiring only one third of the installation space. The units also deliver higher continuous output and greater torque.

The foundation for these groundbreaking motors was originally developed by British electric motor specialist YASA – a wholly owned subsidiary of Mercedes-Benz AG. But it was Mercedes-AMG that, in close collaboration with YASA, elevated this concept to an entirely new level of performance for series production in the new AMG.EA platform.

The high-performance battery is a completely new development from Affalterbach, inspired by Formula 1®. It enables a high power output that can be called up frequently and repeatedly, contributing to the vehicle's outstanding overall performance. The battery uses newly developed cylindrical NCMA cells, which offer efficient cooling and a high energy density of over 300 Wh/kg thanks to the cells' tall and narrow format. The laser-welded aluminum cell housing improves electrical and thermal conductivity and contributes to the battery's robust and long-lasting performance.

The battery cells are intelligently and directly cooled by an electrically non-conductive oil, which optimally regulates the temperature of each of the more than 3,000 cells. This cooling ensures even heat dissipation and supports the high continuous power potential of the energy storage system. Voltage of over 800 volts reduces weight through lighter cables and shortens charging times, while intelligent thermal management precisely controls the temperature of the cells to ensure maximum performance even under extreme conditions.

This enables the CONCEPT AMG GT XX to charge extremely quickly. The technology platform charges at over 850 kW across a wide range of the charging curve. In just five minutes, it can recharge enough energy for a range of around 400 kilometers (WLTP)[1] – equivalent to the distance from Nardò to Naples.

CONCEPT AMG GT XX records for battery-electric vehicles

Distances

Kilometers	Time	Miles	Time
2,000	08h:40m:34.22s	2,000	0d:14h:03m:10.25s
3,961 [2]	17h:14m:42.06s	5,000	1d:11h:27m:03.47s
5,000	21h:54m:47.48s	10,000	2d:23h:15m:45.04s
7,300 [3]	1d:08h:07m:58.11s	15,000	4d:11h:52m:28.70s
10,000	1d:20h:10m:00.45s	20,000	6d:00h:23m:07.85s
20,000	3d:16h:41m:52.75s	25,000	7d:14h:09m:52.47s
21,196 [4]	3d:22h:03m:22.22s		
25,000	4d:15h:44m:51.02s		
30,000	5d:14h:26m:53.71s		
40,000	7d:13h:02m:59.47s		
40,075	7d:13h:24m:07.10s		

Time

Hours	Kilometers
12	2,749.924
24	5,478.881
48	10,859.526

[1] The figures are provisional. The range figures are provisional values based on digital simulations of the standard WLTP test procedure. No confirmed figures from an officially recognized testing organization, no EC-type approval and no certificate of conformity with official figures are available at this time. Deviations between the figures and the official figures are possible. No binding values are available yet.
[2] Length of Route 66
[3] Approximate distance of all races in a Formula 1® season
[4] Length of the Great Wall of China

72	16,250.444
96	21,632.451
120	26,807.575
144	32,099.133
168	37,259.955

The team of drivers

Ralf Aaron	Mercedes-AMG Performance Driver (GT Sport)	Estonia
Marc Basseng	GT Driver	Germany
Colin Caresani	GT Driver	Netherlands
Adam Christodoulou	Mercedes-AMG Expert Driver (GT Sport)	United Kingdom
Marvin Dienst	GT Driver	Germany
Cesar Gazeau	GT Driver	France
Marcel Marchewicz	GT Driver	Germany
Uwe Nittel	Rallye Driver	Germany
Doriane Pin	F1 Academy, LMP2- and GT Driver	France
George Russell	Mercedes-AMG PETRONAS F1 Team Driver	United Kingdom
Dominik Schraml	GT Driver	Germany
Dominik Schwager	GT Driver	Germany
Tom Schwister	GT Driver	Germany
Luca-Sandro Trefz	GT Driver	Germany
Norbert Siedler	GT Driver	Austria
Luca Stolz	Mercedes-AMG Performance Driver (GT Sport)	Germany
Fabian Vettel	GT Driver	Germany

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About Mercedes-Benz USA

Mercedes-Benz USA (MBUSA), headquartered in Atlanta, is responsible for the distribution, marketing and customer service for all Mercedes-Benz products in the United States. MBUSA offers drivers the most diverse lineup in the luxury segment with 18 model lines ranging from the sporty GLA SUV to the flagship S-Class and the dynamic all-electric vehicles from Mercedes-Benz. MBUSA is also responsible for Mercedes-Benz Vans in the U.S. More information on MBUSA and its products can be found at www.mbusa.com and www.mbvans.com. To learn more about all Mercedes-Benz entities in North America, visit group.mercedes-benz.com/northamerica.

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