

Mercedes-Benz pushes forward with autonomous New programs in California, Nevada and China on track to impact us all

Mercedes-Benz receives approvals for turquoise-colored automated vehicle marker lights in California and Nevada

Mercedes-Benz has become the world's first automotive manufacturer to receive permits for special exterior marker lights for automated vehicles (AVs) in California and Nevada. The California exemption permit for testing AVs in that state is initially limited to two years. The Nevada permit applies to model year 2026 production vehicles and awaits future statutory modification with the state legislature.

Both permits allow Mercedes-Benz to gain insights into the interaction of AVs and other road users. The inclusion of marker lights aims to achieve public acceptance of automated driving, while also contributing to road safety, making the automated system's status clearly visible from the exterior. It also allows law enforcement to identify the system's status and determine whether drivers are permitted to engage in secondary activities during the conditionally automated journey.

In accordance with SAE J3134 Recommended Practice, turquoise-colored marker lights for automated driving in California are integrated into the front and rear lights and outside mirrors in testing vehicles.

The automated driving marker lights will initially be integrated into testing vehicles in California equipped with DRIVE PILOT, the world's first SAE-Level 3 system for conditionally automated driving with internationally valid type approval. DRIVE PILOT received certification in Germany in 2021 and separate certifications in Nevada and California in 2023. DRIVE PILOT has already been available for orders in Germany since 2022 in the S-Class and the EQS Sedan. The first production vehicles make their US debut on the freeways of California and Nevada.

The use of turquoise as the color fulfills two essential criteria that contributed to this choice: its visibility allows quick detection for other road users, and it differentiates from existing vehicle lighting, traffic

signals and emergency lighting. Both physiological and psychological factors attest to higher values in turquoise "in almost all areas" than other colors. Turquoise is also described in the industry-recommended practice SAE J3134 "ADS Marker Lamps." Mercedes-Benz is committed to globally standardizing the color turquoise as a means to visualize the automated driving state, and toward acceptance of this technology. So far, there is no general framework in the US, China or the UNECE (United Nations Economic Commission for Europe).

Mercedes-Benz obtains approval for conditionally automated driving test license in Beijing to advance in the Chinese market

In December, Mercedes-Benz became one of the first automakers to receive approval for the conditionally automated driving (Level 3) highway road test license in Beijing, China. They will begin conditionally automated driving system testing on designated highways in Beijing while adhering to its "safety first" principle, actively cooperating with relevant authorities in developing its Level 3 systems for China.

Since 2021, Mercedes-Benz has conducted proving ground tests for conditionally automated driving systems in China. In China, Mercedes-Benz integrates its global research and development experience with a local R&D team, while cooperating with local partners and adapting to local regulations to deliver tailored products for Chinese customers.

Mercedes-Benz automated driving efforts began in 1986 with adaptive cruise control testing. Having received the world's first internationally valid system approval for conditionally automated driving in late 2021, they are today the only OEM with the world's first internationally valid system approval for conditionally automated driving and an SAE Level 4 driverless parking system in place. In China, they have been conducting proving ground tests of Level 3 systems for years. ■

