

The evolution of sports cars

When it comes to the fastest production (road-legal) cars in history, the last century has demonstrated how brands have really shifted gear to push performance faster and faster over time.



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<u>Comparethemarket.com.au</u> created a video to visualise the evolution of the fastest production car of each decade, spanning the last 100 years. As well as providing an average horsepower and top speed figure, the video shows how the shapes of these speed machines have changed over time.

The roaring '20s: Old fashioned speed machines

Sports cars during this decade were a statement in elegance, but that didn't stop them from paving the way for faster supercars in years to come. With an average horsepower between 50 and 70, engines ranged from four to eight cylinders and the fastest of the lot reached speeds over 100km/h. Adorned with stately leather seats and hoods that opened sideways, models like the Bentley 3 Litre or Rolls-Royce Phantom Jonckheere Coupe are timeless pieces of art as much as they are road cruising machines.

The '40s saw speedy automobiles, such as the Aston Martin Atom and Jaguar XK120 become more curved with smoother shapes and lines to minimise wind drag. These cars' bodies also sat lower to the road, and they grew wider to make room for larger, more powerful engines like the Jaguar's 1970CC twin carburettor heart or the six-cylinder dual overhead camshaft XK6 engine used on the Jaguar XK120. World War II caused a bit of a dip in the average top speed in our animation, as some car manufacturers turned their efforts into creating engines for their nation's war machines.

The era of the muscle car

The '60s beckoned the golden age of American muscle cars, like the Chevrolet Corvette C1, the 427 Stingray and Shelby Cobra – long, powerful cars designed to go fast in a straight line. European brands produced agile roadsters with sleeker angles and headlights that retreated into the car's framework, further reducing wind drag to help the fastest cars of this decade reach speeds over 270kph.

This decade also saw the legendary battle between Ferrari and Ford, as well as Ferrari and Lamborghini.

An age of sci-fi

Beastly supercars of the '80s saw rear spoilers become fashionable not just for their sci-fi looks but also increased downforce – providing grip around fast corners. Rear ends grew larger and recessed side vents (fender vents) became popular for their style and ability to relieve pressurised air, improving stability.

Leading into the '90s, stability became an issue. The Mercedes-Benz CLK GTR flipped over backwards at speeds of over 300km/h in 1999 on the Mulsanne straight at Le Mans. The same model had also become airborne twice previously, including one instance involving Australian racer Mark Webber.

A new millennium, a new age of supercars

At the turn of the millennium, cars became wider at the rear and angled slightly downwards; this design helped them to maintain a neutral or negative pitch, helping reduce any air pressure build-up. A new century also saw new contenders enter the race, such as Koenigsegg, Zenvo and Shelby SuperCars (SSC).

Cars like the Bugatti Veyron, SSC Ultimate Aero, Zenvo ST1, Koenigsegg Agera R and Hennessey Venom GT all brought more than 1,000 horsepower to the road. In the early 2000s, the fastest supercars and hypercars were able to reach speeds just over 400km/h. In the late 2010s, the fastest hypercars were recording speeds over 480km/h. In 2019 the Bugatti Chiron was the first to break 300mph (490km/h).

A shift to green power

While recent years have seen a growing number of supercars embrace hybrid and pure electric engines, electric cars aren't anything new. In 1899, Belgian inventor Camille Jenatzy created the first car to reach 100km/h, La Jamais Contente

(The Never Satisfied). It was a fully electric one-seater missile (literally shaped like a missile, with its cylindrical body and conical nose and tail) on four wheels.

Pininfarina's CEO Michael Perschke said, 'electrification unlocks the door to a new level of performance and a zero-emissions future,' when he announced the Pininfarina Battista, a fully electric hypercar with 1,900 horsepower (released in 2020).

What's next?

The race for supercars is always speeding up with carmakers pushing the limits of aerodynamics, power and style. Looking to 2020, Hennessey Performance is working on a new carbon fibre chassis for their Venom F5 to help propel its car to speeds of over 490.85km/h, according to one Hennessey Performance spokesperson. Indeed, the competition may never end as luxury marques and performance brands chase racing glory – and at least right now, there are exciting things to come.

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