

A NEW FOUNDATION FOR A NEW ERA: THE TOURBILLON'S PLATFORM



In the fourth episode of the 'A New Era' docuseries — available on YouTube today — the French marque delves into the heart of what makes the Tourbillon¹ a true masterpiece and a forerunner of a new era of hyper sports cars: its completely new Bugatti platform. Carefully crafted to express the pursuit of engineering excellence, this cutting-edge design has allowed Bugatti to redefine its future, setting the foundation for many years to come.

Across Bugatti's 115-year legacy, the brand has always been built on pushing boundaries, and the creation of a new platform for the next generation of hyper sports car is no exception. While the Veyron and Chiron² platform had formed the backbone of Bugatti for two decades, the Tourbillon presented the perfect opportunity to redefine the pinnacle of automotive excellence once again with an all-new architecture.

“We have always thought about how we could do it even better, how could we create a design that is even more beautiful than the Chiron. We thought about how we could improve its proportions, refine the aerodynamics, and further enhance the driving experience for the customer.”

EMILIO SCERVO
CTO OF BUGATTI RIMAC

For Bugatti, starting with a clean sheet of paper was not a necessity — it was an opportunity. The team used this chance to rethink every element of the car. Allowing the Tourbillon to emerge as something entirely unique, something that is even more emotional and dynamic than its legendary predecessor.

One of the most groundbreaking aspects of the Tourbillon, the powertrain combining a naturally aspirated V16 engine and three electric motors represents a marvel of engineering and packaging. The entirely new platform allowed the Molsheim team to integrate the powertrain and all other of its technical features in the most optimal way.

At the front of the car, five of a total eight radiators are strategically positioned. Two radiators on the outside channel air directly to the engine, while the ones in the center direct airflow from Bugatti's iconic horseshoe grille to cool the cabin and electrical components with ultimate efficiency.

Behind the luggage compartment, the electric axle — comprising two 250kW electric motors — has been seamlessly integrated. This setup not only provides full four-wheel drive capability but also allows for torque vectoring, which dramatically improves performance and handling by diverting torque to either front wheel as needed.

Core to the new platform is a centrally housed, T-shaped battery that delivers 800 HP of electric power and acts as a structural part of the monocoque. Positioned in the middle for a perfectly balanced center of gravity, the 24kWh battery unit enables over 60 km of range in pure electric mode. This new architecture also delivers a fixed seating position with a movable pedal box and steering wheel, minimizing both the height and weight of the Tourbillon.

At the rear lies the heart of the Tourbillon — the naturally aspirated V16 paired with a third, rear electric motor. The sheer length of this engine required Bugatti's engineers to employ a new approach to packaging, which brought the engine closer to the driver. By relocating the fuel tanks to the sides, the brand was able to keep the hyper sports car's wheelbase and length under control while maximizing interior space. The integrated crash structure within the huge diffuser provides further weight optimization, avoiding the need for a complete rear beam.

More than just a hyper sports car; the Tourbillon is a statement of intent, a signal that Bugatti's commitment to excellence continues to guide its future. The platform on which it is built marks a new chapter for Bugatti, one defined by unprecedented levels of optimization and performance. As Bugatti moves into its next era, this platform will remain fundamental to everything the brand does from now on.

“What I’m most proud of is how the overall design of the car feels like the work of a single hand. Although many talented contributors were involved, the Tourbillon feels like a complete and holistic product. Just by looking at it, you can sense that it’s not just a collection of parts thrown together; starting from scratch has allowed us to create something cohesive and thoroughly considered, as if crafted by one vision — a truly incomparable Bugatti.”

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Watch the full episode 'A New Era: Foundation of a new Chapter' on the official Bugatti [YouTube](#) channel.

² Tourbillon: This model is currently not subject to directive 1999/94/EC, as type approval has not yet been granted.

² Chiron: WLTP fuel consumption, l/100 km: low phase 44.6 / medium phase 24.8 / high phase 21.3 / extra high phase 21.6 / combined 25.2; CO₂ emissions combined, g/km: 572; efficiency class: G