

# 0-400-0 KM/H IN 42 SECONDS: BUGATTI CHIRON SETS WORLD RECORD



- 41.96 seconds for acceleration from a standstill to four hundred kilometres per hour and braking to a standstill
- The fastest time ever reached and officially measured for this driving manoeuvre for a production vehicle throughout the world
- Bugatti confirms the exceptional position of the Chiron in terms of acceleration and braking and its leading role in the extreme performance range
- World record set by Juan Pablo Montoya, winner of the Formula 1 Monaco Grand Prix, two-time winner of the Indy 500 and three-time winner of the Daytona 24 Hours
- Montoya: "It is really impressive how stable and consistent the Chiron is. Its acceleration and braking are simply incredible."
- For 0-400-0 km/h (0-249-0 mph), the Chiron only needed a distance of 3.112 kilometres

- The test run was supervised and officially certified by SGS-TÜV Saar
- 0-400-0 record is the first step to a new world speed record for production vehicles planned by Bugatti for 2018
- Bugatti President Wolfgang Dürheimer: "300 of the limited series of 500 Chiron have already been sold. The success story of this exceptional super sports car continues."

World record for the Bugatti Chiron<sup>1</sup>: the 1,500 PS super car from Alsace has accelerated from a standing start to four hundred km/h and braked back to a standstill in just 42 seconds (41.96). This is the fastest time ever reached and officially measured for this driving manoeuvre for a production vehicle throughout the world. The run was supervised and officially certified by SGS-TÜV Saar, part of SGS, the world leader in inspection, testing, verification and certification. The Chiron completed the manoeuvre in a distance of only 3.112 kilometres. This underscores the supercar's unique position in the extreme performance range. The world record was set by Juan Pablo Montoya, winner of the Formula 1 Monaco Grand Prix, two-time winner of the Indy 500 and three-time winner of the 24 hours of Daytona. The 0-400-0 manoeuvre is the first step on the way to a new world speed record for production vehicles which Bugatti intends to set in 2018 and a further highlight in the success story of the Chiron, which made its world debut last year. 300 of these exceptional super sports cars, which are being produced in a limited series of 500 vehicles, have already been sold. Bugatti is presenting the 0-400-0 world record Chiron at the 67th International Motor Show (IAA) which is being held in Frankfurt from 14 to 24 September 2017. The Bugatti stand is located in Hall 3.

A weekend in August 2017. It is dry and sunny and the wind conditions are calm. The Chiron rolls up to the start with racing driver Juan Pablo Montoya at the wheel. He has a long straight ahead of him. Using the Top Speed Key which is typical of Bugatti, he activates the Top Speed mode, which allows a Chiron to drive faster than 380 km/h. A signal is heard. He places his left foot firmly on the brake pedal. Montoya engages first gear and then activates the Launch Control. The digital display beside the speedometer acknowledges the command received and the 1,500 horses wake up. On your marks! Full concentration for the driver and team. Bugatti invited Montoya to complete the 0-400-0 km/h manoeuvre under real-life conditions to underpin the exceptional position of the Chiron in terms of braking and acceleration. He accepted, eager to meet Bugatti and the Chiron.

Montoya presses the accelerator to the limit with his right foot. The 8 litre W16 engine runs up to 2,800 rpm. The powerful turbochargers speed up and there is no doubt that this car is straining at the leash. Get set! Montoya releases the brake pedal. Go! The four wheels of the Chiron receive equal power and grip the tarmac with full force. The car shoots forward, developing maximum torque. The traction control prevents the wheels from spinning. In combination with ESC (Electronic Stability Control), it catapults the Chiron forward, keeping it firmly on track. Full acceleration. The time is running. The world flies past.

The incredible acceleration of the Chiron, its absolutely linear power curve and the enormous torque especially in the low engine speed range are the result of the two-stage turbocharging system developed by Bugatti especially for this vehicle. This is one of the outstanding technical features of the Chiron powertrain. To ensure maximum acceleration from a standing start without any "turbo lag", the Chiron initially moves off with two turbochargers in operation. The other two units are activated from about 3,800 rpm.

The new high-performance tyres, once again developed by Bugatti together with its strategic tyre partner Michelin, now face extreme loading. At a speed of 400 km/h, centrifugal force converts one gram of rubber into 3,600 grams. A tire valve that only weighs 18.3 grams when stationary develops a hefty force of approximately 45 kilograms at that speed.

Only 32.6 seconds and just 2,621 metres later, the Chiron reaches the 400 km/h mark. With extremely fast reactions, Juan Pablo Montoya steps firmly on the brakes. Only 0.8 seconds after operation of the brakes, the rear wing, with a width of 1.50 metres, moves up to an angle of 49 degrees, forming an air brake that decelerates the Chiron extremely effectively. In the Top Speed mode at 400 km/h, the airbrake boosts the aerodynamic downforce on the rear axle by about 900 kg. That corresponds to the kerb weight of a Golf II. During full braking with a Chiron from 400 km/h, the force on vehicle and driver is about 2 g, similar to that experienced during the launch of a space shuttle.

The brakes of the Chiron, with their special carbon ceramic brake discs (diameter of 420 mm at the front, 400 mm at the rear) and brake calipers developed especially for Bugatti with eight titanium pistons on each wheel at the front and six at the rear, develop absolutely peak performance. After an incredible 9.3 seconds and 491 metres, the Chiron comes to a halt.

The V-Box 3i, the GPS-based measurement system used by the inspectors from independent testing and certification company SGS/TÜV Saar which supervised the tests, indicated 41.96 seconds. During this time, the Chiron only covered a distance of 3,112 metres. This means that the Chiron is significantly faster than its predecessor, the Bugatti Veyron 16.4, which raised a furore with its performance and caused an upheaval in the automobile world at the time.

The Chiron has set the yardstick for this driving manoeuvre extremely high. Wolfgang Dürheimer, President of Bugatti Automobiles S.A.S., says: "Bugatti is the first car brand that not only calculates how fast a car can go from zero to 400 to zero on a computer. We actually drove it. Where others are satisfied with theory, we validate our data with real-life values. Just like we did with the Chiron."

"Our customers want the best of the best. This truly impressive performance further confirms that the Chiron is the world's best super sports car," adds Dürheimer. "300 of the limited series of 500 Chiron have already been sold. The success story of this exceptional super sports car continues."

For its 0-400-0 project, Bugatti invited Juan Pablo Montoya, a proven speed and performance expert. He accepted the invitation without any hesitation. "My first thought was that I would do anything Bugatti wanted in order to drive this incredible car."

The former Formula 1 driver, who is now active in the IndyCar series, was especially impressed by the fact that a super sports car actually felt like a normal road vehicle. "When you are driving the Chiron for the first time and taking it easy, you cannot imagine how powerful it is. But as soon as you open the throttle, you hear the turbochargers pull up and all this torque comes in, and it just does not stop. It is like a linear power curve to happiness."

Montoya is thrilled at the acceleration and braking performance of the Chiron. "The Chiron is so incredibly fast it takes your breath away. And its braking is at least as impressive," is how he describes his impressions following the record run. "And the car is just so stable and consistent. I feel honoured to be part of this project."

Following a test lap, the 41-year-old from Colombia decided not to wear the usual safety gear such as racing suit, helmet or HANS (head and neck support) device for the record run. "Of course, the Chiron is a super sports car that requires your full attention when you are behind the

wheel. At the same time, it gave me such a feeling of security and reliability that I was entirely relaxed and really enjoyed myself during my two days with the car.”

During the world record weekend, Juan Pablo Montoya travelled faster than 400 km/h 17 times and also had an opportunity to improve his own personal speed record of 407 km/h, recorded with an IndyCar racing car to 420 km/h with the Chiron. “It really was incredible to see that you didn’t need the complex preparations we have to make in racing for the 0-400-0 drive,” said Montoya. “With the Chiron, it was all quite easy. Just get in and drive off. Incredible.”

“I hope Bugatti will invite me to their world record run with the Chiron. At any rate, I’m saving the date in my calendar,” says Juan Pablo Montoya. In 2018, Bugatti plans to set a new world speed record in excess of the top speed of 431.072 km/h recorded with the Veyron 16.4 Super Sport in 2010.

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<sup>1</sup>Chiron: WLTP fuel consumption, l/100 km: low phase 44.56 / medium phase 24.80 / high phase 21.29 / extra high phase 21.57 / combined 25.19; CO2 emissions combined, g/km: 571.64; efficiency class: G