

World record holder Sebastian Steudtner rides a 28.57m wave

22/04/2024 German big wave surfer Sebastian Steudtner has surfed the possibly biggest wave ever measured at 28.57 metres (93.73ft) in Nazaré, Portugal. The height was measured using state-of-the-art drone technology developed by Porsche Engineering and Team Steudtner. Official confirmation of the new record is still pending.

"I am very grateful to Porsche for the cooperative partnership over the past three years," says Sebastian Steudtner, "True to 'Driven by Dreams' and with Porsche as a partner I have been able to fulfill my dream of contributing to the further development of my sport." The current world record, which Steudtner also set in Nazaré in 2020, is 26.21 metres (86.4ft).

Drone prototype in use for the first time

In Nazaré, the drone prototype from the joint technology project between Team Steudtner and Porsche Engineering was used. This project involves the development of a measuring drone that is intended to

determine the height of waves quickly and precisely. Until now, video footage and still images were analyzed for these types of measurements.

The prototype from Porsche Engineering and Team Steudtner is equipped with cameras, control units and storage devices. In addition, sensors from vehicle development are used, which support modern driver assistance systems. The device can measure all areas of the wave and the surfer within a radius of about 100 metres.

"We are very pleased to have created an innovative solution that can advance the sport of surfing. It was a challenge to develop a drone that can measure not only the height of the waves but is also capable of tracking the surfer within the radius throughout the entire wave ride," says Marcus Schmelz, Project Manager at Porsche Engineering.

The official confirmation of new world records is the responsibility of official sports governing bodies. "We are open to share our technical insights from the drone development with official experts. Our goal is to further increase transparency in big wave surfing and to provide accurate measurement data more quickly," Schmelz continues.

Project „Mission Wave Alpha“ from Steudtner to further develop surf sport

Steudtner has based himself in Nazaré for the last few years as part of his “Mission Wave Alpha” project, which has seen him work with his partners Porsche, Porsche Engineering, Schaeffler, O2 - the German telecommunications provider, DVAG and X-BIONIC to take the sport to the next level on all fronts, from surfing the biggest waves to water safety, board materials & design. Deniz Keskin, Director of Brand Management and Partnerships at Porsche, adds: “Having mastered a potential highest world record wave on his new board ‘Caçador RS’ is a true pinnacle to three years of intensive cooperation with Sebastian. We are proud of our contribution and are delighted that our conviction to be an enabler rather than a pure sponsor has proven to be a great success.”

Helping to surf the biggest waves possible, Steudtner developed surfboard technology in partnership with Porsche Engineering and Schaeffler to significantly optimize his surfboard over the past three years. Using the latest simulation methods and wind tunnel validations, the water and air resistances were successfully reduced. As a result, with the new board ‘Caçador RS’, Steudtner can now reach speeds of up to 100 km/h, compared to the previous 80 km/h. The higher speed is necessary to ride larger waves – because the taller a wave is, the faster the surfer must be so that it doesn't overrun him. It was this advantage in speed which now enabled Steudtner to ride the potential next record wave.

“Big Wave Surfing is a beautiful sport; I love it and I am very proud to be able to bring it to the next level through development of safety and technology and believing in my dream. It is my goal to improve big wave surfing and take it to the next level. Together with my team, which is driven by its unique can-do

mindset to define possible in big-wave surfing, we were able to accomplish this mission," emphasizes Sebastian Steudtner.

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