Electric touring racecar

An inside look at the CUPRA e-Racer

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- **Four engines, located at the rear, succeed in reaching 12,000 rpm and accelerating from 0 to 100 km/h in 3.2 seconds**

- **The car features an energy recovery system to harness power when braking and decelerating**

Martorell, 19/12/2018. – Looking at what could be described as a multimedia x-ray, a 3D animation takes us on a journey deep inside the CUPRA e-Racer, the world's first fully electric competition touring car. With a year to go before it makes its debut, we examine the bones of this car and its main components:

- A 450 kg battery, the core element: It accounts for a third of the vehicle's total weight and is a challenge when developing this model, as explained by the head of engineering at CUPRA, Xavier Serra: **"The battery determines the entire design and position of the remaining elements"**. It is located **"as low as possible so that the centre of gravity is closer to the ground and enhances the car's dynamics"**, he points out. This part is made up of 23 panels with a total of 6,072 battery cells, generating the same power as 9,000 mobile phones connected at the same time.

- Four 'green' engines': These are mounted over the rear axle and deliver 680 hp. **"The electric engine is less complicated, more efficient and requires less maintenance"**, says Xavier. The CUPRA e-Racer has a single gear that **"gives us wonderful acceleration, from 0 to 100 km/h in 3.2 seconds and a top speed of 270 km/h"**, explains this engineer.

- No energy is lost; it is transformed: This car features an energy recovery system that harnesses energy from braking and decelerating. The steering wheel of the CUPRA e-Racer has

a display panel that the driver and engineers can monitor and transfer a full range of vehicle performance data in real time while driving for efficient energy management.

- Temperature control: On the track, the technical team and the driver himself must know how to manage the temperature of the components. This car is equipped with a bespoke cooling system in the radiator, which provides cooling in around 20 minutes. **"There are three independent cooling circuits, as each element has different temperature limits: the battery threshold is 60 °C, the inverters 90 °C, and the engines 120 °C"**, points out Xavier Serra.

- Final stretch towards a new racing format: CUPRA engineers and technicians continue to work to get the most out of the car. **"This vehicle generates a lot of energy and we're working on how to use it efficiently and achieve good lap times"**, explains Xavier. In this sense, regardless of whether the car is equipped with an electric or a combustion engine, the goal is the same**: "to be the fastest and cross the finish line in first place."** Components and strategy go hand in hand, a combination that will peak in 2020 when the CUPRA e-Racer competes for the first time in the new ETCR Racing format.

CUPRA is a special brand for unique people designed to captivate customers looking for what the new brand has to offer: Uniqueness, Sophistication and Performance. The time has come for car lovers to get involved with a new brand that meets their expectations. Along with the launch of new models, CUPRA will also keep the motorsport and racing spirit alive by participating in the TCR series. The CUPRA world is alive and ready to conquer a new group of enthusiasts in more than 260 specially selected SEAT dealerships all across Europe

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