

Accelerator Techniques by Ayrton Senna

The Formula 1 designers and engineers always endeavoured to improve the power of the car with more and more powerful engines and machines. But these factors alone do not turn a driver into a champion.

“If a driver doesn’t know how to take advantage of all of the engine’s potential, this work is wasted.”

The read out the engine displays is its number of rotations per minute shown on the dashboard. The maximum output is the maximum number of rotations needed for acceleration. In a Formula 1 car, this indicator is always close to, but different from, the maximum number of rotations allowed by the engine. In order to avoid wasting power in the acceleration, it is important to know the following: what is the maximum power the engine can reach? You can’t just hit the accelerator. The acceleration technique that Ayrton Senna explains requires a good knowledge of the engine’s torque and power. The accelerator should be used when the engine RPM gauge is within the maximum torque range – it means that the car can be “pushed” forward by the torque –, allowing for shifts to higher gears when this limit is reached.

“By knowing these parameters and the corresponding types of rotation, a driver can take advantage of acceleration and all of their engine’s potential.”