On a scale of 1 to 10, the level of difficulty on the brakes is 7. Here's why

The Australian GP according to Brembo
An in-depth look at the demand on the Formula 1 brakes at the Melbourne circuit

From 18 to 20 March, the 2016 Formula 1 World Championship opens at the Albert Park Circuit in Melbourne (Australia).

The Australian circuit is a city track that winds its way on the streets of Albert Park. It's a fast track (last year Lewis Hamilton took pole position going an average of 221 km/h) and quite demanding on the brakes. A good part of the 9 braking sections on the circuit have a medium-high level of difficulty on the braking systems and are characterized by variable stopping distance decelerations. Because it is a non-permanent track, during the race weekend it is gradually rubberized (in 2015, from the first session on Friday to Q3, the lap times fell by 3 seconds), which causes an increase in both deceleration and brake stress in terms of temperature and wear.

According to Brembo technicians, Albert Park falls into the category of mid-level difficulty for the brakes. On a scale of 1 to 10, it earned a 7, which is identical to other curvy race tracks like Monte Carlo, Budapest, Sepang, Spielberg and Baku.

Brake use during the GP

The amount of time spent braking on this track, which is equivalent to 18% of the overall duration of the race, is average for the championship. By contrast, the average deceleration rate is quite high: 4g amongst the highest of the braking sections on the circuit. Albert Park is one of the World Championship tracks where the single-seaters dissipate the greatest quantity of energy in braking: on average a vehicle reaches 238 kWh, which is more than the energy dissipated by a single-seater on the Suzuka and Silverstone tracks put together. On the other hand, throughout the entire Grand Prix, each driver has to break no less than 500 times, applying a total pedal load that surpasses 64 tonnes.

The most demanding braking sections

Of the 9 braking sections at Albert Park, 6 are classified as demanding on the brakes, two present a medium level of difficulty and only one is considered light on the braking systems. There are five highly demanding braking sections, those with a deceleration measuring more than 4.4 g, and all are approached by cars going 300 km/h or only slightly less. The most feared is the Brabham at turn one because the drivers arrive at a speed of more than 320 km/h and they have to decelerate by 5.3 g: the brake power required is 2,700 Kw, one of the highest values for brake power in the whole World Championship. There are two braking sections that register a medium level of difficulty on the brakes (Marina and Prost) and only one that is slightly challenging, turn 4, where just a light touch of the brake pedal slows the car down 20 km/h.

Brembo Wins
In Australia, Brembo has won 15 of the 31 races it has competed in as of today, with a score 48%. The driver who has won the most with Brembo brakes at Melbourne is Schumacher with 4 victories, followed by Berger and Senna with 2 wins each.
None of the active drivers have won the Australian GP twice with Brembo brakes.