

Vale-Jorge for 4-3, 7 thousand salami sandwiches and 123 go-karts: welcome to Misano

The San Marino and Rimini Coast MotoGP according to Brembo

An in-depth look at the premium class' use of braking systems at the Misano World Circuit Marco Simoncelli.

The Misano World Circuit Marco Simoncelli will host the 13th race of the 2016 MotoGP World Championship from 9 to 11 September. The circuit has been operative since 1972, but it changed its name in honour of Marco Simoncelli in 2012. The 4.2 km-long track is run clockwise and is packed with 16 curves: 10 to the right and 6 to the left. Braking ranks medium on the difficulty scale for brakes and deceleration ranges between -0.8 and -1.4 g. This mid-level difficulty is due to both the intensity of the cut outs and temperature control. According to Brembo technicians, who work with all of the MotoGP riders (Brembo is supplier to 100% of the premium class riders), the Misano World Circuit Marco Simoncelli falls into the category of tracks that present mid-level difficulty on the brakes. On a scale of 1 to 5, it earned a 3 on the difficulty index, the same score given to the Silverstone Circuit and 7 other tracks.

Brake Use During the GP

Ten of the 16 curves on the track require deceleration, which means that throughout the course of the race, the braking system is used for an average of 12 minutes. Since the bikes never go over 300 km/h, unlike at Mugello - the other Italian World Championship circuit - the average deceleration remains at just 1.17 g. Totalling all of the force applied on the brake lever by one rider from the starting line to the chequered flag, the sum is more than 1.35 tonnes, which is equivalent to 7 thousand salami sandwiches.

The Most Challenging Stops

Of the 10 stops on the Misano World Circuit Marco Simoncelli, none are considered very challenging for the brakes, but 6 present mid-level difficulty and 4 are light.

The Quercia Curve (number 8) dips slightly downhill and is the stage for the longest and most difficult braking: 246 metres, the same length as more than 123 go-karts lined up in a row. In just 5 seconds with a load of 6.9 kg on the lever, the bikes go from 291 to 75 km/h. Immediately after this is the Tramonto Curve (number 10), a turn that is tough on the riders and the brakes because of its design and slope: the bikes drop from 239 to 75 km/h in 4.6 seconds in a space measuring 194 metres. Not to be underrated is the Misano Curve (number 16) just before the arrival, because the asphalt is rough and it slopes downhill. The best riders manage to limit braking here to only 109 metres, applying a load of 6.4 kg on the lever.

In terms of required space, the longest braking section is at Curve 13 where the riders brake for up to 300 metres in order to stay on the track, applying a load of 3.8 kg on the lever.

Brembo Victories

As of 2007, the year that the Misano Adriatico Circuit returned permanently to the World Championship, bikes with Brembo brakes have always triumphed in MotoGP on this track. Valentino Rossi and Jorge Lorenzo have each won three times, while Marc Marquez, Dani Pedrosa and Casey Stoner have one victory each. Ducati has not won on this track since 2007.