

BREMBO CONTINUES TO BE THE LEADER IN FORMULA 1 BRAKING SYSTEMS

Stezzano (Italy), 27 February 2023 – Brembo confirms the leadership in the Formula One World Championship ahead of the 2023 season, which starts on 3-5 March with the Bahrain Grand Prix.

Thanks to the extensive experience gained over 48 Formula One seasons, in which cars with Brembo brakes have won 27 Drivers' World Championships, 32 Constructors' World Championships and 485 Grand Prix races, the company has developed new braking systems customized for each team and will supply most of the single-seaters with hydraulic (calipers, master cylinders and by-wire units) and friction components (carbon discs and pads).

A look at 2023 braking systems

Over the past twenty years, Brembo has revolutionized **the concept of disc in Formula 1**. In the early 2000s, Brembo carbon discs had a thickness of 28mm with a maximum of 72 holes in a single row and a diameter that exceeded of 10mm. Today, the diameter has increased from 278mm to 328mm for the front axle carbon disc and from 266mm to 280mm for the rear one, with a thickness of 32mm and a number of holes between 1,000 and 1,100 at the front, while 900 holes at the rear in the most extreme setup in terms of cooling.

In terms of **weight**, the 2023 braking system is around 300/350g lighter compared to 2022 where it was heavier than 2021 to fit the new cars. However, the car's minimum weight remains unchanged at 798kg even for 2023. In order to achieve this result, Brembo Group engineers worked hard to optimize the design of the different components, calipers and carbon parts in primis, while taking the geometries to extremes.

The advantage of less weight is significant, as ballasts are placed on all cars in useful positions to enhance the car balance, directly impacting performance. Lighter brakes therefore mean having more margin to better balance the car.

In terms of **pads**, drilled ones will also be banned in 2023, according to regulations.

Brembo engineers expect a 5% increase in braking torque for each single-seater compared to the 2022 single-seaters.

Brembo Group calipers for all teams

In 2023, Brembo's extensive presence on the grid is confirmed. The Brembo Group will supply its calipers to all 10 teams. In particular, nine teams will be supplied with Brembo calipers while a team will be supplied with AP Racing calipers, a company based in Coventry (UK) owned by the Bergamo-based company.

All 20 Formula One drivers will have new nickel-plated and machined from billet six-piston calipers, the maximum number allowed by the regulations.

Five teams will also use the by-wire units developed by Brembo and AP Racing to manage rear braking, which balances out the braking forces between front and rear axles, instantly changing the dissipative braking contribution according to the regenerative one, and ensuring the right balance between front and rear axles.

Customization, telemetry and maintenance

Every Formula One car is set up differently. Brembo engineers worked with each team to define the optimal ratio between weight and stiffness of the new brake calipers. **Thanks to its long-standing expertise, Brembo has designed a brake caliper for each team that allowed them to reach the targeted ratio.** Some teams will prefer lighter but also less rigid calipers, while others will adopt stiffer but heavier solutions. It is a delicate balance that leads Brembo to develop dedicated solutions for each single-seater's braking system.

By using sensors in the wheel corners, teams will be able to know the temperature of the discs and calipers at all times. Based on the data collected, the teams' engineers will be able to support the driver in the optimal management of the single-seater's temperature and braking balance.

New Brembo Racing logo

Along with the start of the 2023 Formula 1 World Championship, Brembo is launching a **rebranding of the iconic Brembo Racing logo.**

Always part of Brembo's DNA, Motorsport is itself undergoing a change from pure competition to shared passion, experience and entertainment. Therefore, it is the passion the natural attitude that drives all Brembo employees and allows them to always reach new goals, never stopping innovating products and solutions with a look at the future and new generations.

The new logo of Brembo Racing features this journey, expressing the evolution in its character and values. Passion is combined with excellence, innovation, partnership, ambition and sustainability.

In line with the company's new visual identity launched at the end of 2022, the Brembo Racing logo also gets a new look, taking from the Brembo logo a new simpler and more modern lettering and adding the ending 'racing' in a font with a contemporary style.

Reflecting the company's strategic "Turning Energy into Inspiration", in the occasion of the 2023 Formula 1 Championship start, Brembo launches also the new Motorsport campaign marked by the payoff "Turning Passion into Performance".

Starting today, the new logo will be rolled out globally across all of the company's digital and physical assets.

About Brembo SpA

Brembo SpA is the world leader and acknowledged innovator of brake technology for automotive vehicles. Brembo supplies high performance brake systems for the most important manufacturers of cars, commercial vehicles and motorbikes worldwide, as well as clutches and other components for racing. Brembo is also a leader in the racing sector and has won more than 600 championships. Today the company operates in 15 countries on 3 continents, with 30 production and business sites, and a pool of over 12,200 employees, about 10% of whom are engineers and product specialists active in R&D. 2021 turnover was € 2,777.6 million (31.12.2021). Brembo is the owner of the Brembo, AP, AP Racing, Breco, Bybre, J.Juan, Marchesini and SBS Friction brands.

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