Carl F. Bucherer once again impressively demonstrates its innovative capacity with the introduction of the new Manero Tourbillon DoublePeripheral. The CFB T3000, a unique movement developed entirely in-house, is a world first that combines a peripheral automatic winding system and a peripherally mounted tourbillon that appears to float. The internationally successful Lucerne-based watch manufacturer is the pioneer of the peripheral automatic winding system that also provides the technological basis for the floating tourbillon. Further highlights are the stop-seconds function of the tourbillon and the fact that the movement is a COSC-certified chronometer.

Baselworld 2018. Following several years of development, the watch manufacturer located in the heart of Switzerland presents the new Manero Tourbillon DoublePeripheral; an elegant and exclusive timepiece that truly lives up to its name. The engineers and watchmakers of Carl F. Bucherer developed a completely new movement specifically for this timepiece. The CFB T3000 manufacture caliber draws power from its automatic winding system containing a peripheral rotor making the tourbillon feature very distinct. The watch’s precise function is ensured by a tourbillon, which is mounted peripherally and thus appears to float inside the watch. Both of these technical features are specialties of the family-owned watchmaker and give the new masterpiece its name: Manero Tourbillon DoublePeripheral.

Masterpiece of Micromechanics
More than 200 years ago, the development of the tourbillon provided an ingenious solution for a technical problem that had previously impacted the accuracy of a watch. Pocket watches of this era were usually nestled in the waistcoat pockets of their owners, which caused them to always be carried upright. The vertically rotating balance wheel was thus constantly exposed to the Earth’s gravitational pull, and even a minimal imbalance could sometimes lead to considerable inaccuracies in the pocket watch’s timekeeping. This positional error could only be compensated for if the entire oscillation system permanently and uniformly rotated around its own axis, changing the gravitational pull. It was therefore housed in a rotating cage and referred to as a tourbillon – a French word that translates as “whirlwind.” This delicate regulator continues to fascinate to this day with its micromechanical complexity and constructive brilliance. The tourbillon is deemed to be one of the most elaborate and prestigious complications offered in a watch, with only a few manufacturers having mastered its construction.
A Tourbillon with the Best View

For a tourbillon to rotate around its own axis, it must be mounted accordingly, which was first achieved with a ruby bearing in the watch’s main plate and another in the balance-wheel bridge. The so-called flying tourbillon represents a further development and is only mounted to the main plate. This means that observers can admire the tourbillon at work without any obstruction, but only from above. Carl F. Bucherer went one step further. The newly designed CFB T3000 caliber provides an unhindered view of the regulator both from above and below, making the tourbillon appear to float within the movement. The tourbillon cage is actually supported peripherally by three ceramic ball bearings, which ensure a stable connection, precise guidance, and smooth running, while at the same time remaining invisible to observers.

Carl F. Bucherer also uses state-of-the-art technology for the escapement, which has a pallet and escape wheel made from silicon. Due to its low friction, this system can run without lubrication, which increases the power reserve to at least 65 hours, and cannot be negatively impacted by magnetic fields. This modern construction allows for a high level of accuracy and meets the requirements of the chronometer norm. This feature is just as distinct as the timepiece’s stop-seconds function, which enables the wearer to synchronize the watch with a standard time. The watch also features a tribute to Swiss watchmaking tradition in the form of the Geneva stripes on the movement’s bridge. This can be admired through the sapphire crystal in the case back that is not concealed by a conventional winding rotor thanks to the peripheral rotor that powers the watch and revolves around the movement. Carl F. Bucherer was the first manufacturer to put the peripheral automatic winding system into series production in 2008. It is part of the first CFB A1000 manufacture movement as well as the CFB A2000, which was presented in 2016, and is now used in the new CFB T3000.

Refined Technology, Exquisitely Presented

Such a unique tourbillon deserves the full attention of its observers. Therefore, it was prominently placed at 12 o’clock, making it a real eye-catcher. The tourbillon cage, which rotates around its own axis every minute, features a second hand that acts as a seconds display. With a diameter of 43 millimeters, the case made from 18-karat rose gold provides a harmonious and elegant setting for this new manufacture movement. Its classic round shape with a slight protuberance at the crown is a traditional and established feature of the Manero family. A convex silver-colored dial adds volume in the display with appliquéd gold-plated wedge-shaped indices and faceted gold-plated lancet-shaped hands. The sapphire crystal with anti-reflective coating on both sides beautifully accentuates the exquisite face of this watch. A hand-stitched brown alligator-leather strap ensures that the timepiece sits comfortably and securely on the wearer’s wrist.
Facts and Figures: Manero Tourbillon DoublePeripheral

Reference number: 00.10920.03.13.01

Movement: Automatic, CFB T3000 manufacture caliber, COSC-certified chronometer, diameter 36.5 mm, movement height 4.60 mm, total height on tourbillon 6.66 mm, 32 jewels, power reserve of at least 65 hours

Functions: Tourbillon, hour, minute, small seconds, stop-seconds function

Case: 18 k rose gold, convex sapphire crystal with anti-reflective coating on both sides, sapphire-crystal case back, water-resistant to 30 m (3 atm), diameter 43.1 mm, height 11.57 mm

Dial: Silver-colored with appliquéd rose-gold-plated indices

Strap: Hand-stitched Louisiana alligator leather in dark brown, folding pin buckle in 18 k rose gold

Patents

Rotor patent: Automatic winding mechanism with peripherally suspended rotor ring that is mounted with three ceramic ball bearings on its inner circumference. The three ball bearings are mounted on springs and act as a shock absorber. In contrast to centrally mounted rotors, the peripheral rotor ensures an unhindered view of the movement and allows for the watch’s flat design.

Tourbillon patent: Tourbillon with peripherally mounted rotating carriage. With the tourbillon of Carl F. Bucherer, the mounting of the carriage is ensured by three ceramic ball bearings, which support and guide the bearing wheel at its circumference. These can be adjusted by an eccentric mechanism in order to optimally set the clearance. In comparison to conventional tourbillons, this construction allows for a lower height and an unhindered view of the rotating carriage from both sides.

* Patent pending.
Text and images can be downloaded free of charge from:
http://media.pprmediarelations.ch/Carl+F+Bucherer/Baselworld+2018/Manero+Tourbillon+DoublePeripheral

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About Carl F. Bucherer

The Carl F. Bucherer name has been synonymous with quality, innovation and passion since 1888. Founded in Lucerne, the Swiss family business has become an internationally renowned global brand characterized by its founder’s pioneering spirit and the cosmopolitan esprit of its home. Carl F. Bucherer is one of the few remaining family-owned Swiss watch manufacturers and is now headed in the third generation by Jörg G. Bucherer.

Timepieces and movements are developed and produced in the brand’s own workshops in Switzerland. Milestones are the manufacturer’s own movement families, which are partly driven by an external rotor – an innovation that Carl F. Bucherer was the first manufacturer to put into series production. With its exclusive watch creations, Carl F. Bucherer epitomizes high-quality Swiss craftsmanship, unmistakable style and detailed sophistication.

*Carl F. Bucherer – Made of Lucerne*