

*A watchmaker at  
Manufacture  
Cartier examines  
a mechanical  
movement during  
the final stage of  
assembly.*





# CARTIER GETS SERIOUS

BY JOE THOMPSON

*Why the king of haute joaillerie is suddenly storming the bastion of haute horlogerie.*

**I**n April 2008, Cartier startled the watch world with the introduction of its first ever Geneva Seal watch, the Ballon Bleu Flying Tourbillon. At the time, some watch industry observers (including this reporter) considered it a stunt.

Cartier is a genuine watch power; it is either the second- or third-best-selling Swiss watch brand in the world after Rolex. (Omega and Cartier both claim to be number two.) However, famously French Cartier had no tradition of making mechanical movements in-house and no watch manufacturing roots whatsoever in the canton of Geneva, which is a key requirement to earn the allegedly prestigious *Poinçon de Genève*. So how did Cartier get the Geneva Seal?

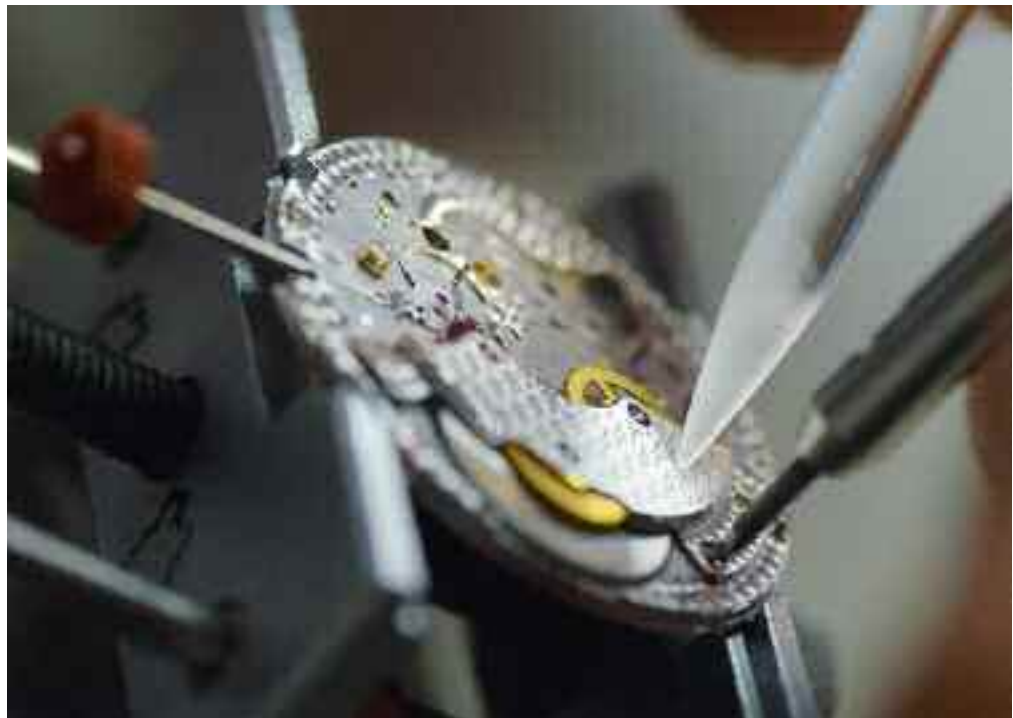
In 2007, Cartier's parent company, Richemont SA, acquired the production facilities of Manufacture Roger Dubuis in Geneva, which specialized in making Geneva Seal movements. Cartier

promptly took over an atelier in the Dubuis facility and installed 10 master watchmakers there. The flying-tourbillon caliber they produced there, the 9452 MC, is based on a Roger Dubuis design. *Voilà*: Paris-based Cartier, with watch production facilities in La Chaux-de-Fonds and Fribourg, Switzerland, was transformed into a Geneva Seal brand. Technically it was legit. But the question lingered: Was the expertise really Cartier's or was it Dubuis behind a Ballon Bleu facade?

Two years later, it's clear that it really was Cartier. What some saw as a stunt was actually a shot, an opening salvo announcing Cartier's emergence as a bona fide mechanical movement producer with serious ambitions in high horology.

In the past two years, Cartier has rushed with Usain Bolt-like speed into the high-mechanical men's market. It has unveiled 17 new men's mechanical watches and nine new *manufacture* move-

*Below and opposite: Assembling and decorating movements at Manufacture Cartier*







Cartier  
director of  
movement  
development  
Carole  
Forestier-  
Kasapi

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ments (including another Geneva Seal movement), at least six of them conceived, developed, prototyped, and produced entirely in Manufacture Cartier, the firm’s giant watchmaking facility in La Chaux-de-Fonds. Among them is a new base automatic caliber, 1904 MC (for Manufacture Cartier), the first Cartier has produced in-house. It was launched this year in a new men’s watch collection, Calibre de Cartier. Caliber 1904 MC will be the base movement for future Cartier automatic models, including those with complications.

Perhaps the most surprising new development at Cartier — and the best evidence of its burgeoning high-mech might — was the presentation last November of the Cartier ID One, a concept watch developed by Cartier engineers that may be the world’s first watch that never needs adjusting. The watch is loaded with innovative mechanisms and materials, inside and out, such as hairsprings made of Zerodur, a balance wheel made of carbon crystal, an oscillating weight coated with amorphous diamond-like carbon and a niobium-titanium case. It is currently ticking away in the research-and-development department in the *manufacture* under the engineers’ watchful eyes and promises to deliver new advances in high horology for future Cartier watches. (For details, see “Cartier’s Concept: A No Adjustment Watch” in the January-February 2010 issue of *WatchTime*.)

All of these developments have left watch collectors and aficionados surprised, impressed, and confused. They identify Cartier more as a maker of jewelry, scarves and handbags for their wives than of high-mech marvels for themselves. What, they wonder, is going on?

What’s going on, according to top Cartier executives from Paris and La Chaux-de-Fonds, is a new chapter in the firm’s long, often illustrious watch history. Cartier execs acknowledge that Cartier today is more of a ladies’ line: it is the world’s top producer of jewelry watches. In the United States, for example, women’s models account for two-thirds of Cartier watch sales. Cartier execs also acknowledge that they are somewhat late to the luxury-mechanical-watch party and, at this point, don’t bring a lot of high-mech credibility with them. Nevertheless, they point out that their conversion to mechanical movement manufacturing is in keeping with Cartier’s identity as a *maison* (French for “house”) whose craftsmen and women historically produce its own luxury products, and with its heritage as a pioneer in men’s wristwatches with icons like the Santos and Tank.

Nor is Cartier’s mechanical conversion as sudden as it might seem. Cartier International CEO Bernard Fornas says its new men’s mechanical watches have been in development since 2005. They reflect a strategy undertaken on Fornas’s watch to shift the firm from being a mechanical-watch assembler relying on a network of suppliers for movements and parts to being a vertically integrated *manufacture*. To that end, Cartier has quietly spent a fortune over the past six years developing in-house the mechanical watch know-how it needed. The mission was not simply to have Cartier take its place as a watch *manufacture* next to Vacheron Constantin, Jaeger-LeCoultre, A. Lange & Söhne, Piaget and other sister firms within the Richemont Group. It was to make movements that reflect Cartier’s image as

a paragon of creativity and design. That has led to a dramatic transformation in Cartier's watchmaking operations.

**CARTIER DECIDED TO START** making its own mechanical movements a year or so after Fornas became CEO in 2002. Cartier then, as now, produced several hundred thousand watches annually (the firm does not disclose the exact number). It was already vertically integrated for its quartz-watch production, a legacy of the 1980s and 1990s when Cartier was a quartz-watch powerhouse. In the 1990s, 80 percent of Cartier's production was quartz. It produced almost all (90 percent) of its quartz movements in-house and manufactured a significant percentage of its cases and bracelets.

For its mechanical watches, however, like many Swiss watch firms, it was an assembler, relying on a network of outside suppliers for its mechanical movements. A decade ago Cartier's movement supplier network worked well, says Jean-Kley Tullii, director of Manufacture Cartier, a 15-year Cartier veteran. The



*Cartier CEO Bernard Fornas*

*Cartier's 40,000-square-foot manufacture in La Chaux-de-Fonds*





factory had access to mechanical movements from suppliers within the Richemont Group like Jaeger-LeCoultre and Piaget as well as a number of prominent outside suppliers like Girard-Perregaux. By 2004, however, with demand for mechanical watches soaring, rising to 40 percent of Cartier output (it's now up to 50 percent), the movement issue came to a head. "Rapidly, we noticed that the network didn't support the level of quality that we wanted," Tullii says. There were other issues, too, like delays in getting deliveries of movements and concerns about securing spare parts from movement suppliers for future watch repairs. Overriding everything was the issue of what Cartier execs call "legitimacy." "You cannot ask someone else to make the product for you," says Carole Forestier-Kasapi, the movement development chief at Manufacture Cartier. "At a certain point you have to do it yourself." As Fornas puts it, "Nobody is better served than by oneself."

Gradually it became clear that Cartier must become master of its mechanical-watch fate. Says Tullii, "We said, 'OK, we have to invest and master all the steps.'"

They did it through what they called the "Think Tank" project (a cute play on Cartier's most famous watch model, the Tank, launched in 1919). Fornas approved the project in 2004. It took three years to complete. The "Think Tank" project not only brought requisite skills for mechanical



*Testing watches (above) and a watchmaker performing a balance-wheel pivoting operation (left) at Manufacture Cartier*

watchmaking in-house, it totally reorganized Cartier's watch production operations, centralizing them in the glass building it had opened in La Chaux-de-Fonds in Switzerland's Jura Mountains in 2000. The project's motto was "One team, one place." The goal was to take watch employees and operations that were scattered over 100 miles in Switzerland and put them all within less than 1,000 feet of each other within the *manufacture*. (One example: Cartier produced watch bracelets in 12 different sites in the region.) When it was finished in June 2007, Cartier had created one of the largest fully integrated watch production facilities in Switzerland. Within the building, expanded to 40,000 square meters, 900 employees from 37 countries work in every area of watchmaking, from research and development to after-sales service. The *manufacture* is organized in zones that bring

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A view of the back of  
Caliber 9611 MC with  
bridges shaped in the form  
of Roman numerals



together all the skills required to produce a particular watch or movement so as to facilitate communication between departments. In the new *manufacture*, Cartier's vertical integration is on display. It makes quartz movements, mechanical movements, movement components (plates, bridges, etc.), cases (including gem-set ones for jewelry watches), bracelets, straps, hands (33 percent of its total), all of its mineral crystals, and dials (including all of its enamel dials).

As part of the reorganization, Cartier hired from outside and developed inside the talent it needed to make mechanical watches for its Fine Watchmaking collection. It built a movement development department around the highly respected French-born Forestier-Kasapi, who worked with Giulio Papi at Audemars Piguet Reynaud & Papi before joining Cartier 10 years ago. She now oversees 20 people. Cartier's R&D department has 12 engineers. For the last half of the last decade these people were nestled in their new ateliers in Manufacture Cartier engaged in a frenzy of mechanical watch activity, developing all at once Cartier's first in-house automatic movement, a slew of new mechanical movements, and the ID One concept watch.

**THE RESULT IS A SERIES** of new Cartier watches notable for their design creativity and technical ingenuity. Take the two watches containing Cartier's first mechanical movements created and produced entirely in-house, the Santos 100 Skeleton and Ronde de Cartier Central Chronograph, introduced last year. The Santos 100 Skeleton differs from other skeleton watches in that Forestier-Kasapi designed the movement to display the time. Her patented design shaped the movement's bridges to form Roman numerals at the XII, III, VI and IX positions. Caliber 9611 MC is square-shaped to fit the palladium Santos case. Another novelty is the fine-adjustment pointer designed in the shape of Cartier's stylized "C." Cartier designers use the "C" motif freely on various watch parts. Another example: Cartier's new Calibre de Cartier Flying Tourbillon watch (\$130,000) — one of two new Geneva Seal watches it introduced this year, bringing the total to five — has a C-shaped tourbillon carriage.

You see the Cartier difference — the emphasis on the fine design that is a hallmark of the *maison* — more dramatically in the Ronde de Cartier Central Chronograph, where Cartier invented its own way to display the elapsed time by making the chronograph front and center. The watch has a two-tiered dial. On the bottom tier are the hour and minute hands, which circle

*The Santos 100 Skeleton (\$51,500)*



beneath the chronograph display on the top tier. Needless to say, Cartier's movement construction team had to make some technical adjustments to support the watch's unconventional design. Says Forestier-Kasapi, "We chose a very original display for the Central Chronograph. But we still have a state-of-the-art chrono under the display." Instead of the cam system used in the majority of chronographs, the Central Chronograph's 9907 MC movement uses a column wheel to control the start, stop and reset functions. What's more, Cartier uses a vertical coupling system in the chronograph instead of the usual horizontal release system. This reduces the energy consumption of the chronograph function, Cartier says, and maintains exceptional precision. (See the following story for a review of this watch.)

Cartier's reputation as a design house inevitably colors its approach to high watchmaking. "The main philosophy is to be creative rather than complex," Forestier-Kasapi says. "Technique is at the service of aesthetics and creativity. Our goal is not to be the most complex or have the most complicated watches in the world. The main thing is that the creativity is a tool to be technical."

Forestier-Kasapi's favorite watch of 2010, the *Ronde de Cartier Astrotourbillon* (see the cover of this issue) shows exactly what she is talking about: an unusual technical feat at the service of an unconventional design. Its striking feature is a tourbillon that doubles as a seconds indicator, circling the dial once every minute. The tourbillon's off-center, arrow-shaped balance bridge points to the seconds. The hand-wound Caliber 9451 MC, another 100-percent in-house *manufacture* movement, has several unique features, according to Cartier. First, the tourbillon carriage is positioned at the center of the movement and has a special rotational axis. It requires a totally different gear-train design, from the two barrels of the movement through to the display of the hours and minutes. Second, the balance staff and escapement wheel staff are not on the same rotational axis as the carriage, but are



*Ronde de Cartier Central Chronograph* (\$35,400 in rose gold; \$37,900 in white gold)



*The Central Chronograph's Caliber 9907 MC was designed and produced entirely in-house.*

**CARTIER'S MISSION IS TO MAKE  
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AND DESIGN.**



*Rotonde de  
Cartier Astro-  
tourbillon  
(\$124,000 in  
rose gold;  
\$133,000 in  
white gold)*

located on the carriage's side in linear alignment with the rotational axis. Finally, the tourbillon is positioned above the movement between the two-tiered dial instead of being integrated into the movement, as in classic tourbillons. Look for Cartier to continue to create new and unusual mechanicals. "We'll come out with quite a number of new, highly complicated watches in the next two or three years," Fornas says. "We'll continue to push a lot."

**JUST AS IMPORTANT FOR CARTIER'S** horological legitimacy as its homemade mechanical marvels, however, is Caliber MC 1904, its first in-house automatic movement. The caliber number is significant. It refers to the year that Louis Cartier created the *maison's* first gent's wristwatch. He did it at the request of his friend, Alberto Santos-Dumont, the Brazilian aviator, who needed a wristwatch instead of a pocketwatch when flying because he had both hands on the controls. Cartier's Santos watch collection, which came later, remains an iconic men's wristwatch.

Cartier makes it clear that, like its other new *manufacture* movements, this one is designed to help put it back on the map for men. "We've got a huge potential in the men's market," says Fornas. "A large share of our watch sales is for men. But we can

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*The tourbillon circles the dial every 60 seconds. Its balance bridge also serves as a seconds indicator.*



1. Mini pouch bag  
(Photo: Triple V/Cartier)
2. Trinity ring  
(Photo: Jean-Jacques l'Héritier/Cartier)
3. Louis Cartier Roman numerals fountain pen  
(Photo: Triple V/Cartier)
4. Le Baiser du Dragon perfume  
(Photo: Triple V/Cartier)
5. Ballon Bleu watch

## Cartier's Clout

In global sales, Cartier is one of the world's top three luxury watch brands, with watches priced from \$2,500 to more than \$1 million for some high jewelry pieces. But unlike its watch competitors, it is so much more.

In addition to its monster watch business, it has a monster jewelry business. It also has a monster retail jewelry chain with nearly 300 Cartier boutiques spanning the globe. Then there are the Cartier branded accessories that it sells in its boutiques: pens, lighters, handbags, perfume, small leather goods, scarves and eyewear, much of which (watches, jewelry, handbags, small leather goods, and perfume) it manufactures in-house.

Cartier is, in fact, a cluster of businesses — in effect, a group within the Richemont Group. As such, it holds a privileged position within Richemont.

Richemont is the second largest luxury goods group in the world after France's LVMH Moët Hennessy-Louis Vuitton. Richemont sales for the fiscal year ended March 31, 2010 totaled 5.18 billion euros (\$7.32 billion). Cartier is by far Richemont's biggest brand, accounting for 45 percent of total sales, and its cash cow. Financial analysts estimate that Cartier sales last year totaled about 2.40 billion euros (\$3.40 billion). (Richemont does not disclose sales data by brand. However, it does break down sales by divisions — Jewelry Maisons, Writing Instrument Maisons, Leather and Accessories Maisons and Specialized Watchmakers. The Jewelry Maisons are Cartier and Van Cleef & Arpels; analysts estimate that Cartier accounts for around 90 percent of the division's 2.69 billion-euro sales [\$3.80 billion]). The two jewelry maisons had a

profit of 668 million euros (\$944.5 million), the overwhelming majority of which is Cartier's.

Compare Cartier's results with those of the nine brands in the Specialized Watchmakers division (Vacheron Constantin, A. Lange & Söhne, Jaeger-LeCoultre, Officine Panerai, etc., etc.) and you get a sense of how huge Cartier is. Last year, Cartier sales were nearly twice those of the entire watch division combined; its profit was nearly triple that of the watch division.

During the economic storms of the past two years, Cartier has dazzled. It posted record sales and profits in fiscal 2009 (ended March 31, 2009), and had "a marginal decrease in sales and profitability" in fiscal 2010, according to the Richemont annual report. One reason is its enormous strength in China. Another is the success, little noted in high-mechanical watch circles, of its Ballon Bleu de Cartier watch collection, launched in 2007. "Ballon Bleu," Richemont boasts in the current annual report, "[is] the most successful watch line ever." It's the latest in a long line of Cartier hit watch designs. Why is it ringing the cash registers? Cartier executives cite its round shape (not so common in Cartier, better known for form watches), its unisex appeal (two genders mean more sales), and its unusual case design, with a balloon-shaped ring that surrounds a fluted crown set with a blue sapphire. Cartier CEO Bernard Fornas calls it a "25-meter watch," meaning you can recognize it instantly from across a room. Fornas confirms Richemont's Ballon Bleu boast. "I see the figures," he told *WatchTime* with a laugh, "and I can tell you it is the most successful launch Cartier has ever done."



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do better. Even much better. Now it's time for us to pick up market share."

That's the reason for the new Calibre de Cartier collection, with the new, large 1904 MC caliber. Unlike with the unisex Ballon Bleu collection launched in 2007, whose movement came in a variety of sizes suitable for ladies' and men's watches, Caliber 1904 MC comes in one size only, 11½ lignes. Ditto for the Calibre de Cartier collection; it's a men's-only line of 42-mm-diameter watches.

The new automatic caliber is a robust movement with two barrels that provide plenty of power for the Calibre de Cartier watches and for other complications that Cartier plans to add. It is the base automatic movement that Cartier will build on in the future. The movement has a fine regulation system adjusted via a C-shaped index and a stop-seconds system for precision time-setting. Caliber 1904 MC is another important step in Cartier's vertical integration. Today, says Tullii, Cartier relies on just four outside movement suppliers: Richemont's own move-



*The Calibre de Cartier Flying Tourbillon (left), powered by Caliber 9452 MC (left, above), is one of two new Geneva Seal watches Cartier introduced in 2010.*



*The new Rotonde de Cartier Jumping Hours watch in rose gold (\$30,000)*

.....  
*Cartier's first in-house automatic caliber,  
1904 MC, drives the new Calibre de Cartier  
men's watch.*



ment manufacturer Valflourier, ETA, Jaeger-LeCoultre, and Audemars Piguet Reynaud & Papi.

The Calibre de Cartier watch has a seconds subdial and a calendar window and comes in rose gold, steel or steel-and-rose-gold versions (prices start at \$6,500). It features a smooth, slanted bezel and a 120-notch fluted ring at the edge of the dial. Cartier executives see the collection as a means to “re-engage with our male customers,” as Emmanuel Perrin, CEO of Cartier North America, puts it. “Lately we have been focusing more on the women’s side,” Perrin says. “It’s not that we don’t know how to make a great men’s watch. Look at the Tank or the Santos, great iconic watches that are still very desirable. It’s very important for men to perceive Cartier as an innovator, as a technical craftsman, not to be dismissed as just jewelry for their wives. It *is* jewelry for their wives, definitely. But that’s not the only craft we have under the roof of the House. We are addressing the high-mech craft with the same level of detail as we do our high jewelry.” ○