

“It’s a monster; there’s no chronograph like it in the world.” These are the words of a man with no doubts whatsoever regarding his product, and such energetic statements are extremely refreshing in a horological world full of cautiousness and reserve. They could only come from one person: Richard Mille.



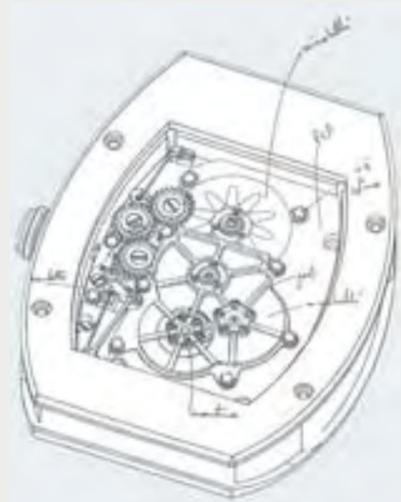
Hard Times: The Chrono RM004

by Theodore Diehl

Richard Mille: The philosophy

Richard embodies all the best aspects of French breeding and culture. He is always impeccably polite and perfectly dressed, even at the weekend. He possesses exceptional taste in both wine and good food at the local *auberge* and has the sharpest nose around for what constitutes exceptional wristwatch design. He is also the perfect showman – one of his favourite tricks is to take his own RM002 watch with tourbillon from his wrist, show it to you and then throw it on the floor with complete *dedain*, as if disposing of a candy wrapper. Despite the presence of carpeting it remains riveting stuff and is physical proof of his mandate requiring lean, cutting-edge toughness from a timepiece. Any other tourbillon would have broken right there and then.

Richard’s philosophy is taken directly from the world of Formula 1 (not as watch-brochure fluff, he actually owns a Formula 1 car) – and it works. The trick is to allow those areas that should remain flexible to bend and yet remain highly shock resistant, whilst those parts that should be extremely stiff under stress are made stronger through the use of special metallurgical composites and the addition of net-like structures – ideas borrowed from racing car technology. His watches have no frills, and their technical beauty is what makes them so visually, as well as mechanically, appealing. All the RM watches are pure machines



The reverse of the RM003 tourbillon. The Formula 1-inspired engineering behind Richard Mille's concept of watchmaking has led to the inclusion of a torque gauge to go alongside the power reserve. Above and beyond this though, the movement is constructed to withstand hard wear and tear – Richard Mille's party trick is to throw the watch to the floor!

for timekeeping. They are also very sexy wrist-watches, offering tantalizing glimpses of strong yet delicate gearwork through layers of sapphire.

Richard is not easily pleased and is known in the industry as a terror. He has parts remade over and over again until the quality – both technical and visual – is exactly as he wants it, bringing tears of frustration to his suppliers. But they all go along with him because they are completely convinced by his visionary concept.

The RM004

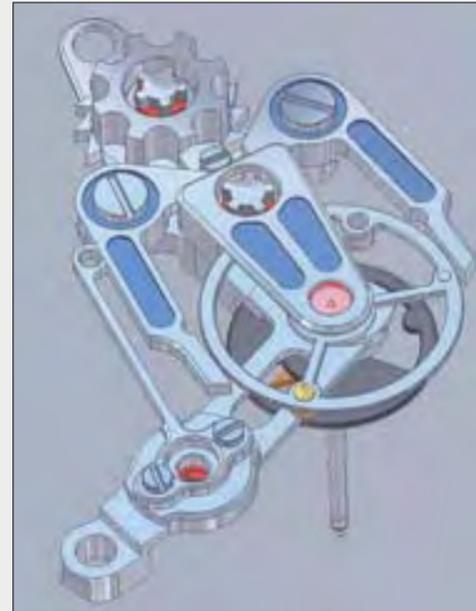
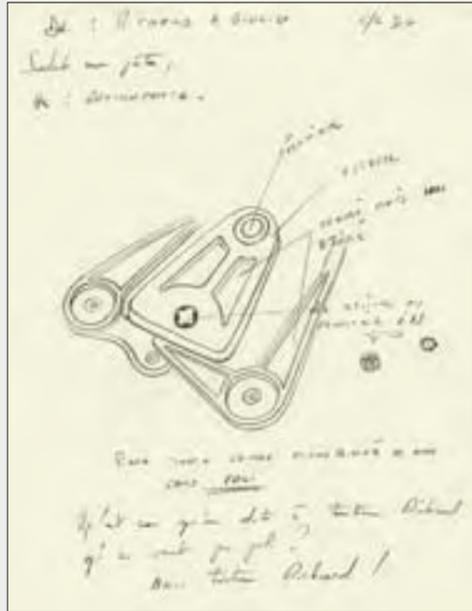
The latest scion of the group is the new chronograph *rattrapante*, the RM004. Although it was scheduled for 2002, it will not be at Basel 2003, and is now finally back on schedule for release this summer. "The extreme demands on our watchmakers and suppliers in the design, manu-

facture, testing and development of this chronograph were quite time consuming. You must remember that we have not only redesigned the chronograph *rattrapante* concept, but also added all the basic features that are common to our philosophy, such as the special attention given to the winding barrel, torque and winding mechanism placement, and all the other attention to detail that our customers have come to expect from our wristwatches."

The split seconds chronograph, otherwise known as the *rattrapante*, works in a similar fashion to a regular chronograph, but has two seconds hands – a sweep seconds hand and a split seconds hand – enabling the timing of two different events. When the start button is pushed, both seconds hands travel together, locked one over the other, so that it appears that only one hand is



The chronograph movement for the RM004 is replete with innovations, ranging from improved split-second function to a new fast-winding spring barrel. There is even an improved escapement.



moving. After the split seconds pushpiece is pressed, the split seconds hand stops whilst the sweep seconds hand continues counting, allowing the user to read an intermediate time on the dial. When the pushpiece is pressed yet again, the split seconds hand catches up with the sweep seconds hand, and the whole process can be repeated.

On the RM004, the split seconds angled pushpiece is located at 4 o'clock, the start pushpiece between 10 and 11 and the stop pushpiece between 7 and 8. The movement beats at 21,600 A/h and has a total height, including hands, of 11.20 mm, with a power reserve of approximately 72 hr, indicated by a *reserve de marché* indicator on the dial near 11 o'clock.

New gear-teeth profiles have been developed for the movement, and the escapement has been redesigned to eliminate as much sliding friction as possible. Mathematical and metallurgical studies analysed the problems of inertia that occur when starting and stopping the seconds hands; this has led to a 50% reduction in extraneous and unwanted 'jumping' of the seconds hands and axle vibration during starting and stopping the *rattrapante*. The slightly larger case requires two more of Richard's famous titanium screws (bringing the total to 12).

The RM 004 may be the last chronograph to the finish line this year, but it will still be the most technically advanced, thoroughbred monster of them all. ◉