

RICHARD MILLE

THE ACCELERATION CHAMPION

Speed has been despised by many, acceleration by no one!

Richard Mille proved himself a real champion of acceleration from the very first moment when he presented the watches that bear his name, taking his creations to the peak of Haute Horlogerie in record time. One decade later, he presented the first watch that allows you to measure acceleration...

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CONSTANTIN STIKAS: *Aside from the aesthetic value of your watches, you have always had a very close and deep relationship with the world of speed, either through your cooperation with F1 pilots and polo teams, or your collaboration and friendship with Rafael Nadal, Yohan Blake etc., or even with your personal profile. How do you see the relationship between speed and watchmaking?*

RICHARD MILLE: Timekeeping in general has always been related to speed. The watch as a timekeeper came into widespread use to assist in accurately measuring a three-dimensional position – and therefore speed – in regards to the question of calculating longitude. Agreed, in that case we are not talking about the speeds of an F1 racing car of today; nonetheless, speed and time are interrelated on many levels, even more so when we add relativity to this mix.

Even at the level of a watchmaking brand's evolution you gave lessons in speed and efficiency with the inclusion in record time of the Richard Mille house in the exclusive

“club” of the most important prestigious companies in the world. What are the ingredients of such speedy success?

Timing also plays a role in the case of success, in the sense of finding the perfect moment when you can combine your philosophy of not accepting any compromise with the process of rationalizing all aspects of the watch as a three-dimensional, holistic entity, inside and out. Together they spell out my success.

Man has conquered 4Hz, remained at 5Hz for more than four decades, and then TAG Heuer achieved 50Hz, two months later 500Hz and a year later 1000Hz!...

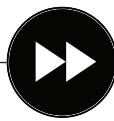
Richard Mille already has a watch that beats at 5Hz in its collection. Do you think this is the ideal frequency for a precision watch? What do you think of the “race” for the highest frequency?

The concept of performance, whether chronometric or technical, has been my obsession ever since the brand was founded. I think reducing the search for accuracy to a discussion of reaching an ever-higher speed for the escapement is



{ Richard Mille }

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a rather simplistic way of working. The problem is much more complex, and, if one ignores other aspects of the question, a higher speed of escapement will not make any difference whatsoever. This is why I spent so much additional time on all aspects of the RM 031 High Performance calibre in addition to the high-speed escapement used. The going train is extremely important as the transmitter of energy from the two winding barrels to the escapement, so, inspired by automobile transmissions, all the wheels of the movement were optimized with a special tooth profile providing a pressure angle of 20°. This guarantees continuous transfer of power along the entire going train. There are many issues like this at the heart of the watch's accuracy, and the speed of the escapement is only one of several issues that need to be addressed to achieve such exceptional results. Everything in my RM 031 was mechanically "fine tuned" – not just the escapement – in order to achieve spectacular timing results. The timing of the RM 031 alone takes almost 3 months to complete before a certificate can be given that guarantees a deviation of less than 1 second a day, with all the testing results recorded for the owner.

Again I stress that the speed of an escapement is only a specific part in the creation of high-performance, accurate timepieces in this class.

Maximilian Büsser stated in his interview that "...after the '70s and the invention of quartz, the mechanical movement has ceased to have any reason for existing... In watchmaking, we can state that in the era of the TGV we are making steam engines. Therefore, when we move from 5 to 6, 8 or 10 Hz, (and I am not talking about 500 or 1000Hz), it is the same as if we were straining to make a steam-powered engine that is 5 or 10% faster than its counterpart..."

And after that, Jean-Pierre Musy, Technical Director at Patek Philippe, replied to Maximilian Büsser's remark: "When we see high-quality watches, they have a chronometrical bulletin, COSC values, meaning -6 to +4. There is a daily deviation of 10 seconds! In any case, it is significant, 10 seconds per day, this amounts to nearly one minute every week! Do you believe that there is nothing to be done? I believe that there is something to be done! There is work to be done in order to improve this situation. We cannot allow ourselves to make watches that have upwards of a one-minute error margin within the space of a week! The mechanical watch must be more accurate than that!" What is your opinion about this?

Again, I refer to what I just said previously: the speed of the escapement alone will never provide the answer to accuracy for mechanical watches, this is simply dead-end thinking... This is not my own discovery; the old makers already knew this in the 18th century! What many people seem to completely ignore in this discussion is the very simple fact that ships' chronometers were exceptionally accurate with beat rates much lower than represented here in these discussions.

The problem is that we have to pay attention to the same issues those historic makers did more than two hundred years ago. This was in essence what I put into the RM 031, a symbol of the mechanical performance pushed to the extreme. The important thing is that the escapement together with extreme attention to the going train, the profiles of the wheel teeth, the baseplate, the internal chemical atmosphere of the watch, the winding barrels, the finishing of all communicating parts for the lowest friction possible and a dozen other aspects achieved an extreme accuracy of less than 1 second a day. Each of the 10 pieces of the RM 031 tested only vary from 20 seconds a month and one of them gets a variation of 1 second a month. The RM 031 is my wristwatch "tribute" to those fabulously accurate ships' chronometers, and represents a holistic approach to the questions behind accuracy.

You have introduced the RM 036, the first watch in the world equipped with a G-sensor. Would you explain your approach, and the relationship of this watch to road safety?

Actually the G-force theme is one coming into play for watches from the world of motor sports; a number of car manufacturers are planning to or already have put such sensors in their cars as an extension of road safety awareness. It gives the owners of such high-end cars an additional source of information about their driving characteristics, and I felt it would be very useful to place this concept within a watch for the same reasons. It also fits in perfectly with the road safety action campaign of my friend Jean Todt, who is now president of the FIA, which is why the RM036 was named after him. And indeed, since men are fascinated by all kinds of mechanical constructions, it adds depth and "sex appeal" to the watch's fascination for owners.

To most people, Switzerland is a "slow" country. However, the CERN is located in Switzerland, and today we have seen Horlogerie regularly breaking the high-frequency record. What is your opinion?

Because the Swiss are a very thoughtful people, they can afford to take the time to really examine precision on all levels with patience and thoroughness. I think that is what drives their fascination with the world of details.

What is your personal relationship to speed? Motorcycle or car?

I love the looks of motorcycles as a kind of ultimate expression of speed and form taken together. However, my main passion is really grounded on racing cars.

Do you believe that a speed limit should be imposed on motorways and, if so, that it should be set at how many km/h?

If I want to enjoy my cars on regular roads, I have to go to Germany for that. I see no reason to drive 130 km/h when the road in front of me is totally empty; but the authorities in countries other than Germany think differently from me...



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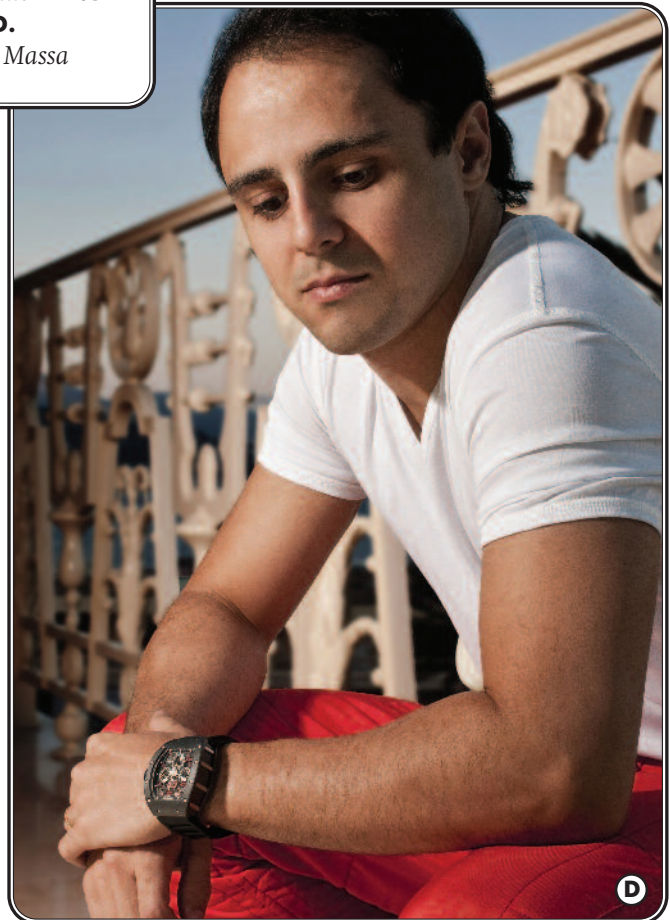


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A.
Yohan Blake
B.
Richard Mille RM 036
C.
Richard Mille RM 031
D.
Felipe Massa



C



D

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