



Retro BY IAN SKELLERN Max

MB&F's second Horological Machine focuses on retrograde displays and a jump hour in a case that makes 13 mm seem thin

When Max Büsser first presented MB&F (Maximilian Büsser & Friends) in the middle of 2006, he announced that his new brand heralded a break from the past. A bold claim indeed, especially falling (as it did) on the ears of a sophisticated watch-appreciating public. Collectors today are more shock-resistant, given to the increasing exposure to audacious *haute horlogerie* from the likes of URWERK, Hautlence, Vianney Halter and of course, the grand-

daddy of them all, the Opus Series by Harry Winston (which Büsser introduced while managing director of the brand).

The launch of MB&F's first watch, Horological Machine No.1, gave substance to Büsser's claim, however, while HM1 certainly announced a new design genre of wristwatch-as-kinetic-three-dimensional-horological-sculpture. But it was just the first step: HM1 was more of an uprising rather than a full-blown revolution.

It is nearly impossible to find

a new model that does not 'build on' its own brand's DNA. Not so Max Büsser: each of MB&F's Horological Machines begins with a blank sheet of paper; each watch stands (or falls) on its own two feet without any DNA to prop it up. That's a risky move, especially for a nascent brand, but MB&F is all about horology on the edge.

Horological Machine No.2 will be easily identified as coming from the MB&F stable by the sheer three dimensionality of its case. Where HM1 owes its form to



"It's a movement Jim, but not as we know it."

The flying buttresses top and bottom add to the solidly engineered machine feel of HM2. Note the emblematic Hakken rotor echoed on the strap clasp.



< new model >



The highly complex modular case demands over 100 components.

The extrinsic movement/rotor and fusion of different metals and colors makes HM2's case look very slim. The quality of finishing throughout case and movement is superb.



an architecturally derived sculpture, HM2 looks to be more engineered, more machine-like. And if Hublot's Jean-Claude Biver was not holding on to the word 'Fusion' like a Rottweiler to a bone, it would be the perfect term to describe HM2. Where the case of HM1 is available only in 18-karat gold, the layered modular construction of the HM2 case lends itself to natural composite coalescence.

The first thing that surprises about Horological Machine No.1 is its size, but not as you might think. Yes at 59 mm x 38 mm it is a large watch, but where HM1 rises off the wrist like an inverted sculptured monolith, HM1 looks positively slim. And I mean slim compared to a relatively 'normal' watch, not slim compared to its sibling. This amazing, 'Honey I shrank the watch' illusion is achieved in three ways: 1) The height (13 mm) of the flying-but-tress-supported base movement with its 22-karat rose gold double Haken rotor (derived from a Girard-Perregaux oscillator and gear train) is completely hidden under the flat rectangular case; 2) The twin dials rise above the case rather than appearing integral to it and do not add to the height of the case; and 3) Shorn of the visual height of its movement and dials, the titanium/gold sandwich layers of the already svelte case halves the apparent height yet again.

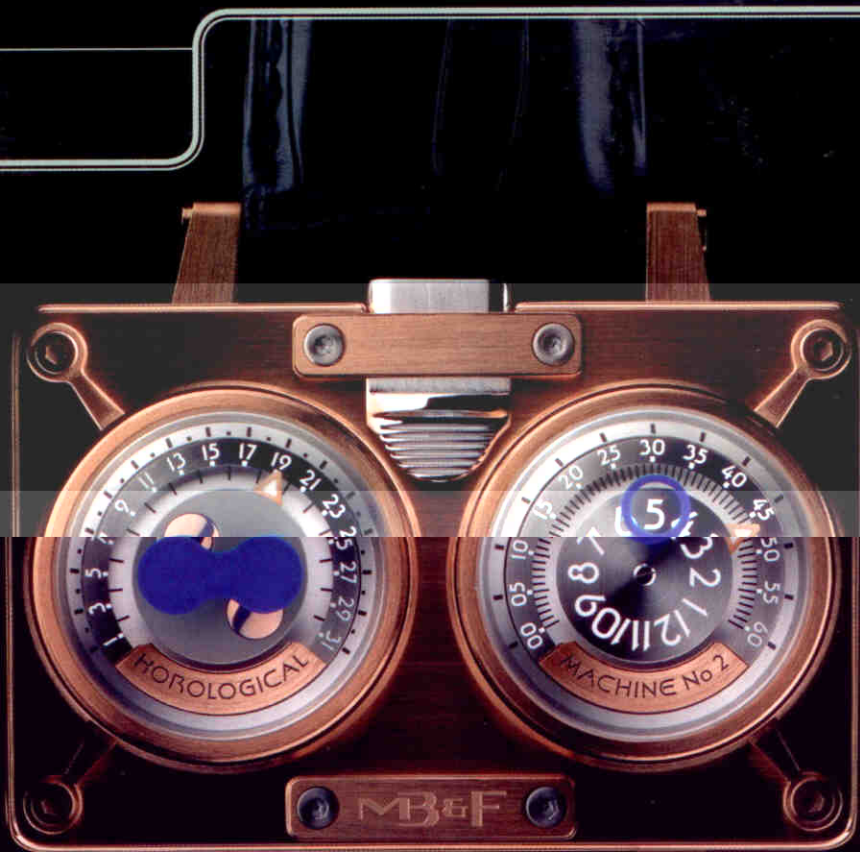
HM2 is perhaps the visually thinnest large watch ever seen. And in case that sounds easy, the modular meccano type construction of the case alone required more than 100 components—that's more parts than in most movements. →

<new model>

Twin dials

The twin dials feature a retrograde date and bi-hemisphere moon phase on the left and jumping hours and concentric retrograde minutes on the right. The master watchmaker responsible for this world-first fusion of indications is Jean-Marc Wiederrecht and his Geneva-based company, Agenhor. Wiederrecht and his team are world leaders in ingenious retrograde and jumping hour mechanisms and Büsser conceived HM2's functions specifically around Wiederrecht's strengths.

If the name Jean-Marc Wiederrecht means little to you, the fact that he was behind no fewer than five watches short-listed in



Left dial: retrograde date and bi-hemisphere moon phase.
Right dial: jumping hours and concentric retrograde minutes.



the 2007 Grand Prix d'Horlogerie de Genève (the watchmaking Oscars) and himself won the inaugural prize for best watchmaker gives some indication of the high caliber of his work.

Wiederrecht's horological masterstroke with HM2 was in ensuring that the jumping hour functions simultaneously with the retrograde minute hand as it fires back from 60 to 0 and that it does that without using self-indulgent quantities of precious energy. The pow-

er for jumping hour indications is usually stored in a spring in the minutes before the "jump," and it is this stored energy that powers the jump.

Unfortunately, while the spring is being charged, power is drained from the balance, causing it to lose amplitude—and that equals bad rate keeping. Wiederrecht's innovative solution was developing a mechanism by which the hour jump is both triggered by and powered by the retrograde minute hand flying back and hitting a "snail" on the minute mechanism. The hour jumps instantaneously with the retrograding minutes because it is triggered by the minutes and, because

MB&F promised a horological revolution. To many, it's a promise that has been delivered with this unusual movement.



the power comes from the minutes flying back, there is virtually no loss of amplitude.

Another feature of Wiederrecht's HM2 complication is the use of his patented play free/bind free gears. Specific gear wheels in the movement are manufactured to extremely high precision using Mimotee's UV-LIGA technology. These gears mesh together with a virtually no-tolerance/no-play engagement. Normally, gears interacting this tightly would bind; however, Wiederrecht's patented asymmetrical-split-tooth gear design ensures this does not occur.

The high precision of this gearing enables very accurate time-setting and offers high reliability. And as with all Horological Machines, the bespoke architecture

of the highly technical movement of HM2 (approx 350 components) was developed to holistically fit and complement the radical form of the modular case.

The sheer fact that MB&F design timekeeping machines for themselves rather than the masses ensures that their concepts are likely to polarize collectors into love/loathe camps. Rather than seek to diffuse the stress, HM2 appears to be designed around incorporating as much tension as possible. There is tension between cutting-edge technology and sculptural art; tension between matte textures and mirror-polishes; tension between high-tech alloys and precious metals, and tension between traditional watchmaking and twenty-first-century micro-

engineering. Balancing all of this tension is an extremely risky endeavor, the slightest error and the whole structure falls flat. However, it is successfully balancing on the razor-edge of all this tension that brings HM2 to life.

Horological Machine No.2 heralds the coming of age of MB&F. A successful second model for a watch brand is like a successful second album for a musical group. It's a strong indication that the talent runs very deep. (Full disclosure: Your humble author is part of the original "Friends" team.)

HM2 is available with either a white gold/titanium or red gold/titanium case and is priced from around \$59,000 (plus applicable taxes). 