

MB&F HM3 FROG AND HM4 THUNDERBOLT

EPISODE 4: A NEW LOOK

The fourth Horological Machine from Max Büsser & Friends takes off BY JACK FORSTER



MB&F HM4 THUNDERBOLT

MOVEMENT MB&F three-dimensional horological engine, manually wound, 72-hour power reserve

CASE 54mm (width) × 53mm (length) × 24mm (height), Grade 5 titanium and sapphire

STRAP Black handstitched calfskin

PRICE US\$958,000

The two latest Horological Machines from the small batch-design hothouse known as Maximilian Büsser & Friends demonstrate just how inexhaustible its collective imagination really is. It's tempting to describe Max Büsser's designs as whimsical, and indeed, since presenting his first Horological Machine, he's often discussed how images from his formative years — ranging from *Star Wars* to Japanese manga — have found their way into his work. So far, regardless of their sources, there's no evidence that the springs of inspiration at MB&F are running dry, and if anything, the watches created there show just how inexhaustible the vocabulary of horology can really be.

Horological Machine No. 3 was Max Büsser's most overtly three-dimensional timepiece when it was produced — the third salvo in his ongoing assault on the tyranny of two-dimensional forms in watchmaking. The basic flatness of watch design is seldom really challenged, and although watches have certainly gotten thicker in general in the last two decades (as well as getting larger), they remain basically a composition in two dimensions. The Horological Machines, on the other hand, challenged the notion of two-dimensionality as the dominant underlying paradigm in watchmaking almost from the outset. While Horological Machine No. 1 does not have the overt three-dimensionality of HM3 (or, even more dramatically, HM4) its case shape, and its raised central tourbillon, gives the impression of a timepiece which is thrusting outward from the wrist rather than sitting statically upon it. The challenge, of course, in such constructions is to create a watch which genuinely takes advantage of a fundamentally three-dimensional vision of design, yet which at the same time also remains a comfortable fit on the wrist. It's a testament to the care taken in the design of each of the Horological Machines that even as they have become more and more overtly three-dimensional, they have retained the ability to not only sit comfortably on the wrist, but also

take into account the specific visual and kinesthetic requirements of designing for the wrist — they are, to borrow a term from art criticism, "site-specific sculptures".

HM3, like the two preceding Horological Machines, begins with a division of the experience of time into two displays, and the first version of HM3 was, of all the Horological Machines so far, the one to most powerfully

the same time, despite its almost outrageous subversion of the personality of its predecessor, it's a quite technical watch in some respects — the sapphire domes, according to MB&F, were very difficult to manufacture (so much so that a few years ago, it would have been impossible to make them) and the gear train for the calendar works had to be re-designed, as the calendar



The HM 4 Thunderbolt is a design artifact first and time indicator second, with the power reserve and dial counters on the sides of the watch rather than the front.

break into three dimensions, with the sapphire-windowed "time cones" showing the hours and minutes on their flanks. HM3, for all its unusual design, projects a certain classical dignity, with an instrumentality reminiscent of high Machine Age design — an era when ornamentation and utility were merely two expressions of a single fascination with the world-transforming potential of mechanics. It's all the more surprising, therefore, that the next version of HM3 would have such a dramatically different personality. The aptly named HM3 Frog takes the regal sobriety of HM3 and turns it on its head, with its two sapphire domes — irresistibly reminiscent of the bulbous eyes of its namesake amphibian — containing two rotating hemispheres decorated with elongated Roman numerals that look as if they've just appeared inside a lava lamp. At

is driven by the hour wheel which in HM3 rotates once every 24 hours, but in the Frog rotates once every 12. There's something almost Picassoid about how the Frog takes the sober, high-mech grandeur of the original design and turns it on its head.

But it's in the HM4 Thunderbolt that the twin design impulses of classically harmonious form and irrepressible humor which run to some extent through the entire oeuvre of MB&F really — we're going to say it — take off. The Thunderbolt is named for the A-10 ground-attack aircraft, but it's not the Thunderbolt's devastating firepower that's the inspiration here; instead, it's the two enormous General Electric TF34 turbofan engines mounted on the aft fuselage of the Thunderbolt — as much a signature aspect of the aircraft's design as its titanium bathtub enclosure for the pilot, or its GAU-8



THE PLANE OF MOVEMENT OF THE GEAR TRAINS HAS TO BE ROTATED 90 DEGREES TO TRANSLATE THE HORIZONTAL ENERGY FLOW OF THE GOING TRAIN INTO THE TWO DISPLAYS FOR THE TIME AND POWER RESERVE

chin-mounted Gatling cannon — which are the source of HM4's distinctive double-barreled configuration. This is the watch unleashed — the Thunderbolt timepiece is a completely three-dimensional design, with the oppressive two-dimensional plane that dominates most other wristwatch designs completely broken by the double-nacelle configuration of the case. A clue as to the extent to which even Max Büsser might regard this as his most radical design to date can be found on the MB&F website — reference material for all the other Horological Machines has information about the movement, but the spec sheet for HM4 refers to its engine.

The terminological distinction's strongly justified by the design of the movement — sorry, engine. The plane of movement of the gear trains has to be rotated 90 degrees in order to translate the horizontal energy flow of the going train into the two displays for the time and the power reserve of the watch.

While it is not a “complication” in the conventional sense of the word, it is a very ingenious watch and very novel in how it so completely integrates the architecture of the movement with the overall design of the watch. Max Büsser has always maintained that a critical aspect of the designs that he and his “Friends” have created is to make sure there is a seamless and organic relationship between design and mechanics, and in the Thunderbolt, he's really put his money where his mouth is.

The result is a timepiece that projects the air of exuberant sophistication that is the hallmark of MB&F watchmaking. As always, of course, it makes us wonder what they've got up their sleeves next, and we can't help but remember that the Fairchild A-10 Thunderbolt has an affectionate nickname by which its pilots know it. Horological Machine No. 3 gave birth to the Frog — who knows, maybe the offspring of the Thunderbolt will be the Warthog. ■



Max Büsser continues to take MB&F to greater heights with his creative vision
TOP The HM3 Frog takes time further into three dimensions with its aluminum dome indicators
OPPOSITE The HM3 Frog is offered in a titanium case with blue 22k gold rotor or in black titanium with a green rotor



MB&F HM3 FROG

MOVEMENT Three-dimensional self-winding horological engine by Jean-Marc Wiederrecht/ Agenhor, 42-hour power reserve

CASE Grade 5 titanium/blue 22K gold rotor or limited edition of 12 black titanium/green 22K gold rotor

STRAP Black hand-stitched alligator

PRICE US\$77,000