**HOROLOGICAL MACHINE N°7 PLATINUM RED**

**SUMMARY**

Having captivated the world with its soaring tourbillon and perfect symmetries over the last two years, the jellyfish-inspired HM7 Aquapod emerges from the depths for a new outing in 2019, this time in the most precious of metals and an arresting new shade – along with three-dimensional, “floating” hour and minute numerals.

Platinum, which sits at the apex of the hierarchy of noble watchmaking materials, makes its debut in HM7, its bright silvery-white hue an emphatic counterpoint to the vividly crimson unidirectional rotating bezel. Used for the first time in any MB&F creation, red is not a colour that immediately comes to mind when thinking of marine life — but it has a very particular significance when it comes to the jellyfish.

The deeper you go in the ocean, the less colour you see. Red is the first colour to disappear, being on the lowest end of the visible light spectrum and thus most easily absorbed by water. This is why you find a higher concentration of red sea creatures in the deepest waters — being red makes them almost invisible to predators. Deep-sea jellyfish often have red stomachs as a form of protective camouflage, as their transparent bodies would otherwise allow predators to spot them via their stomach contents.

HM7 Aquapod Platinum Red comes from the deepest recesses of the horological ocean, with free-floating numerical appendages and unprecedented transparency surrounding its beating heart: a 60-second flying tourbillon.

Unlike previous incarnations of Aquapod, which indicated the hours and minutes via rotating rings with transferred numerals, HM7 Platinum Red features three-dimensional numerals sculpted in titanium. The metal was specifically selected for its lightness, in order to have as little additional marginal load on the engine as possible. However, this mechanical advantage came at a cost, since titanium is exponentially denser and stronger (which is to say, harder to machine) than the aluminium that made up the time-indication rings on previous Aquapod versions.

The stems attaching the hour and minute numerals to their respective mounting rings are rendered black with a coating of DLC (diamond-like carbon), completing the ethereal floating effect that one associates with the sight of a jellyfish drifting with the ocean currents.

One of the most startling visual aspects of a jellyfish, almost alien in how far it is from the mammalian systems with which we are familiar, is its transparency. How can something so diaphanous and seemingly insubstantial be alive? HM7 Platinum Red homes in on this point, replacing the battle-axe tourbillon bridge of previous Aquapod versions with a clear sapphire component. The flying tourbillon of the HM7 engine is revealed like never before, highlighted by a halo of high-luminosity AGT.

Because, of course, HM7 Platinum Red is aglow with luminescence, just as any fascinating creature of the deep should be. Apart from the AGT ring surrounding the flying tourbillon, luminous material is found in the laser-engraved markings of the unidirectional rotating bezel and on the surface of the hour and minute numerals. These are untinted Super-LumiNova, which fluoresce white after exposure to light.

The self-winding, 391-component engine of HM7 Platinum Red was developed entirely in-house at MB&F. Fitted with a platinum case, bezel and buckle, HM7 Platinum Red will be made in a limited series of 25 pieces, each presented with three interchangeable straps (red, white and black) in aircraft-grade rubber.

**HM7 AQUAPOD IN DETAIL**

**INSPIRATION**

The idea for an aquatic watch originated from MB&F founder Maximilian Büsser’s memories of family beach holidays, which included an encounter with a jellyfish. While the encounter may have been minor, the seed it planted in Büsser's brain for a three-dimensional timepiece powered by tentacles was anything but. And even though the concept for Horological Machine N°7 came relatively quickly, the development took many years.

**ENGINE**

Whereas the majority of watch movements are constructed on a lateral plane to be as flat as possible, the HM7 engine goes up, not out, with all of its components arranged vertically. The movement of HM7 was entirely developed in-house by MB&F.

From bottom to top, the winding rotor, mainspring barrel, hour and minute indications, and 60-second flying tourbillon are all concentrically mounted around the central axis. Energy travels from the rotor at the very bottom of the movement to the flying tourbillon at the very top via staggered gearing that allows mainspring torque to be transmitted from one level to the next.

This concentric architecture allows for the hours and minutes to be displayed around the periphery of the movement. However, the concurrent problem arose of how to meet the energy requirements of a large-diameter time-display mechanism without negatively affecting the chronometric performance of the engine. The answer was to develop extra-large ceramic ball bearings, to support the hour and minute displays and rotate with a very low friction coefficient. The time-indication rings are machined from titanium to minimise mass while maximising rigidity.

**INDICATIONS**

Hours and minutes are displayed by two rings bearing three-dimensional massive numerals machined in titanium, giving a floating appearance by the use of DLC-coated stem attachments.

A mix of mirror polish and sandblasting is used to optimise legibility and create visually distinct shapes that are large enough to easily read but still small enough to remain within the weight-bearing capabilities of the engine torque.

The surfaces of the numerals and markers are filled with untinted Super-LumiNova, making them highly legible even by night.

In order to create the illusion that the numerals are floating above the engine and rotating around the tourbillon by mysterious means, the numerals are hand-painted with protective varnish before the entire component is subjected to a treatment that coats the unvarnished surfaces in DLC (diamond-like carbon). With the support structure thus darkened, the hour and minute numerals seem to hover above the engine with no readily visible means of mechanical support.

**CASE**

The case of HM7 Aquapod is basically a three-dimensional sandwich comprising two hemispheres of high-domed sapphire crystal on either side of a metal case band. The unidirectional bezel floats outside the case proper, while dual crowns are located between the two structures: the one on the left is for winding the movement (if necessary) and the crown on the right is for setting the time. The large crowns are ergonomically designed for ease of use.

The bezel begins as a ring of sapphire crystal, which is then laser engraved from the underside with numerals and markers. The resulting cavities are then filled with Super-LumiNova. Following that, a bright red lacquer is applied to the underside of the sapphire-crystal ring. The sapphire crystal ring is then fixed onto the platinum bezel, to be attached to the case.

**HM7 AQUAPOD TECHNICAL DETAILS**

**Limited edition: Platinum 950 with red sapphire crystal bezel (25 pieces)**

**Engine**

Three-dimensional vertical architecture, automatic winding, conceived and developed in-house by MB&F

Central flying 60-second tourbillon, with sapphire balance bridge

Power reserve: 72 hours

Balance frequency: 2.5 Hz / 18,000 bph

Three-dimensional winding rotor in titanium and platinum

Number of components: 391

Number of jewels: 35

**Functions/indications**

Hours and minutes displayed by two grade 5 titanum discs whit flying numbers, turning on oversized ceramic central bearings

Unidirectional rotating bezel for elapsed time

Numerals, markers and segments along the winding rotor in Super-LumiNova

A round segment from AGT Ultra technology (Ambiant Glow Technology) surrounds the flying tourbillon

Two crowns: winding on left and time-setting on right

**Case**

Spherical construction

Material: Platinum 950

Dimensions: 53.8 mm x 21.3 mm

Number of components: 83

Water resistance: 50 m / 150 feet / 5 atm

**Sapphire crystals**

Top and bottom sapphire crystals treated with anti-reflective coating on both faces

**Strap & buckle**

Rubber bracelet moulded in aircraft-grade Fluorocarbon FKM 70 Shore A elastomer, delivered in 3 colours, red, black and white, with folding buckle in platinum.

**'FRIENDS' RESPONSIBLE FOR HM7 AQUAPOD**

*Concept:* Maximilian Büsser / MB&F

*Design:* Eric Giroud / Through the Looking Glass

*Technical and production management:* Serge Kriknoff / MB&F

*R&D:* Ruben Martinez and Simon Brette / MB&F

*Movement development:* Ruben Martinez / MB&F

*Case:* Damien FERNIER / LAB

*Sapphire crystals:* Sebal

*Sapphire tourbillon bridge*: M. Stoller / Novocristal

*Precision turning of wheels, pinions and axes:* Rodrigue Baume / DMP, Paul-André Tendon / BANDI, AZUREA, ATOKLAPA, GIMMEL ROUAGES

*Springs:* Alain Pellet / Elefil Swiss

*Wheels:* Patrice Parietti / MPS Micro Precision Systems

*Titanium rotor:* Marc Bolis / 2B8 SARL

*Plates and bridges:* Rodrigue Baume / HORLOFAB and Benjamin Signoud / AMECAP

*Mystery winding rotor in titanium/platinum:* Roderich Hess / Cendres et métaux

*Hand-finishing of movement components:* Jacques-Adrien Rochat and Denis Garcia / C.-L. Rochat

*Movement assembly:* Didier Dumas, Georges Veisy, Anne Guiter, Emmanuel Maitre and Henri Porteboeuf / MB&F

*In-house machining:* Alain Lemarchand and Jean-Baptiste Prétot / MB&F

*Quality control:* Cyril Fallet / MB&F

*After-Sales Service:* Thomas Imberti / MB&F

*Buckle:* Dominique Mainier / G&F Châtelain / Roderich Hess / Cendres et métaux

*Crowns:* Cheval Frères SA

*Anti-reflection treatment for sapphire crystals:* Jean-Michel Pellaton / BLOESCH

*Dials (discs for hours - minutes):* Emmanuel Desuzinges U-Man Horlogers, Aurora Amaral Moreira / Panova

*Strap:* Thierry Rognon / Valiance

*Presentation box:* ATS

*Logistics and production:* David Lamy, Isabel Ortega and Raphaël Buisine / MB&F

*Marketing & Communication:* Charris Yadigaroglou, Virginie Toral, Juliette Duru, Arnaud Légeret and Maëna Le Gat / MB&F

*Sales:* Thibault Verdonckt, Anna Rouveure and Jean-Marc Bories / MB&F

*Graphic design:* Samuel Pasquier / MB&F, Adrien Schulz and Gilles Bondallaz / Z+Z

*Watch photography:* Maarten van der Ende and Alex Teuscher

*Portrait photography:* Régis Golay / Federal

*Webmasters:* Stéphane Balet / Nord Magnétique, Victor Rodriguez and Mathias Muntz / Nimeo

*Film:* Marc-André Deschoux / MAD LUX

*Texts:* Suzanne Wong / REVOLUTION Switzerland

**MB&F – Genesis of a Concept Laboratory**

2019 marked the 14th year of hyper-creativity for MB&F, the world’s first-ever horological concept laboratory. With 15 remarkable calibres forming the base of the critically acclaimed Horological and Legacy Machines, MB&F is continuing to follow Founder and Creative Director Maximilan Büsser’s vision of creating 3-D kinetic art by deconstructing traditional watchmaking.

After 15 years managing prestigious watch brands, Maximilian Büsser resigned from his Managing Director position at Harry Winston in 2005 to create MB&F – Maximilian Büsser & Friends. MB&F is an artistic and micro-engineering laboratory dedicated to designing and crafting small series of radical concept watches by bringing together talented horological professionals that Büsser both respects and enjoys working with.

In 2007, MB&F unveiled its first Horological Machine, HM1. HM1’s sculptured, three-dimensional case and beautifully finished engine (movement) set the standard for the idiosyncratic Horological Machines that have followed – all Machines that tell the time, rather than Machines to tell the time. The Horological Machines have explored space (HM2, HM3, HM6), the sky (HM4, HM9), the road (HM5, HMX, HM8) and water (HM7).

In 2011, MB&F launched its round-cased Legacy Machine collection. These more classical pieces – classical for MB&F, that is – pay tribute to nineteenth-century watchmaking excellence by reinterpreting complications from the great horological innovators of yesteryear to create contemporary objets d'art. LM1 and LM2 were followed by LM101, the first MB&F Machine to feature a movement developed entirely in-house. LM Perpetual and LM Split Escapement broadened the collection further. 2019 marks a turning point with the creation of the first MB&F Machine dedicated to women: LM FlyingT. MB&F generally alternates between launching contemporary, resolutely unconventional Horological Machines and historically inspired Legacy Machines.

As the F stands for Friends, it was only natural for MB&F to develop collaborations with artists, watchmakers, designers and manufacturers they admire.

This brought about two new categories: Performance Art and Co-creations. While Performance Art pieces are MB&F machines revisited by external creative talent, Co-creations are not wristwatches but other types of machines, engineered and crafted by unique Swiss Manufactures from MB&F ideas and designs. Many of these Co-creations, such as the clocks created with L’Epée 1839, tell the time while collaborations with Reuge and Caran d’Ache generated other forms of mechanical art.

To give all these machines an appropriate platform, Büsser had the idea of placing them in an art gallery alongside various forms of mechanical art created by other artists, rather than in a traditional storefront. This brought about the creation of the first MB&F M.A.D.Gallery (M.A.D. stands for Mechanical Art Devices) in Geneva, which would later be followed by M.A.D.Galleries in Taipei, Dubai and Hong Kong.

There have been distinguished accolades reminding us of the innovative nature of MB&F’s journey so far. To name a few, there have been no less than 4 Grand Prix awards from the famous Grand Prix d'Horlogerie de Genève: in 2016, LM Perpetual won the Grand Prix for Best Calendar Watch; in 2012, Legacy Machine No.1 was awarded both the Public Prize (voted for by horology fans) and the Best Men’s Watch Prize (voted for by the professional jury). In 2010, MB&F won Best Concept and Design Watch for the HM4 Thunderbolt. In 2015 MB&F received a Red Dot: Best of the Best award – the top prize at the international Red Dot Awards – for the HM6 Space Pirate.