**HM3 MEGAWIND Final Edition – Light in the Darkness**

One of the factors that make MB&F Machines so distinctive is the focus on contrast: polished surfaces and matte finishes; precious metals with hard-working steel and titanium; tradition and avant-garde; and bright colours against monochromatic tones. Strong contrasts both catch the eye and engage the mind.

With MEGAWIND Final Edition, the closing model in the HM3 series, MB&F present what may well be the ultimate in contrast: light and dark. The darkness of the black PVD-treated 18k gold case and blackened 22k gold and titanium rotor is punctuated in the dark by the bright green glow of Super-LumiNova. And the light emanating steadily from the indications is in contrast to the stroboscopic flash of light as the rotor covers/uncovers a bright band of lume at the top of the movement.

For this Final Edition, MB&F has called on the latest high-performance Super-LumiNova available on the market today: GL C3 Grade A. This is not only the brightest but also the purest form of the luminescent material, recognisable by its typical green hue; while Super-LumiNova comes in many colours, the active pigments are always green and other colours partially mask the green glow.

Derived from the iconic HM3 series, MB&F's most successful model to date, MEGAWIND Final Edition combines an oversized winding rotor dial side with highly-legible time indication cones rising up from the asymmetric case: hours are displayed on the left, minutes on the right. An exceptionally-skilled artisan painstakingly applies Super-LumiNova on these conical indications by hand, one numeral after the other, with a small syringe – consistently squeezing out just the right amount of the luminescent paste.

While the viewer’s gaze will naturally be attracted towards the three-dimensional sculptures housing the hours and minutes, it is likely to be the giant battle-axe shaped winding rotor that mesmerises the eye as it swings unhurriedly, but indomitably over the meticulously hand-finished movement. It's in the dark however when the rotor really comes alive with light.

MEGAWIND is powered by the beautifully engineered, Jean-Marc Wiederrecht-designed HM3 engine. Placing the rotor and regulator on the dial side required an inverted movement, which was only possible thanks to two large high-tech ceramic bearings – visible through the display back – that efficiently transmit time up to the revolving hour and minute cones above. Rotating domes of this size and shape posed several technical challenges. The hour and minute domes are machined from solid blocks of aluminium, chosen for its optimal strength-to-weight ratio; this keeps energy requirements to an absolute minimum.

Close inspection of the case – which comprises over 50 separate components – is rewarded with a myriad of carefully considered details, including the bevelled perimeter of the rotor display crystal that adds visual flair as the angles catch and reflect flashes of light; the bespoke clover-head gold screws; and the cleverly integrated lugs attaching the strap.

**HM3 MEGAWIND Final Edition is a limited edition of 25 pieces in black PVD-treated 18k gold and titanium, with Super-LumiNova numerals and band under the rotor.**

**MEGAWIND Final Edition in detail**

**Inspiration and Realisation:**

HM3 has an inverted movement so that its operation can be easily seen from the dial side and MEGAWIND Final Edition follows the same principle. Harmoniously crafted bridges, rapidly oscillating balance wheel, gearing and MB&F’s iconic battle-axe automatic winding rotor are all open to view on the dial side. This allows the wearer to fully appreciate the art and craft of the HM3 engine by drawing the viewer’s gaze inside the highly complex machine; a machine comprising more than 300 fine-finished, high-precision components.

The movement of HM3 has been literally turned upside down to allow for an uninterrupted panorama of the powerfully graceful rotation of the 22k gold and titanium winding rotor and the high-speed oscillations of the balance wheel. Jean-Marc Wiederrecht, winner of the inaugural award for Best Watchmaker at the 2007 Grand Prix d’Horlogerie de Genève, was entrusted with turning the drawings and designs of Maximilian Büsser and designer Eric Giroud into horological reality and, with his team at Agenhor, he surpassed the challenge.

**Lume:**

Until MEGAWIND Final Edition, adding Super-LumiNova to the display was thought to be impossible as the lume has to be hand painted on the curved cones of HM3. While no longer impossible, the technique for applying the lume is anything but straightforward.

White paint is first hand-painted onto the numeral shapes of an indication cone projected flat. A silicon stamp is pressed onto this flat surface to pick up the white paint in the correct shape and then the operator carefully uses the stamp to evenly transfer the paint to the three-dimensional cone. The white paint not only serves as a template but also acts as a reflector for the Super-LumiNova, which is then painstakingly applied by hand as a second layer.

While Super-LumiNova comes in many colours, the active pigments are always green and other colours partially mask the green glow so they are less bright. For HM3 MEGAWIND Final Edition, MB&F uses C3 grade Super-LumiNova, which emits the purest and brightest light.

**Indications:**

The hour and minute cones are milled from solid aluminium to paper-thin thickness. The cones are housed within three-dimensional truncated gold and sapphire crystal cones, which are brazed together. Brazing is a high-temperature soldering technique that is aesthetically pleasing and ensures a solid, water-resistant construction.

**The HM3 series:**

HM3 was first presented in 2009 and in its six years of production became MB&F’s most popular model. The case and movement architecture have given rise to no fewer than 19 different variations: HM3 Starcruiser in red and white gold, HM3 Sidewinder in red and white gold, HM3 ReBel, JWLRYMACHINE in purple and pink versions, HM3 Frog Ti, HM3 Chocolate Frog, HM3 Black Frog (green rotor), HM3 Frog Zr (purple rotor), HM3 Fire Frog, HM3 Poison Dart Frog, MoonMachine in titanium, black and red gold variations, MEGAWIND in red and white gold and last, but certainly not least, MEGAWIND Final Edition.

**Mega Rotor:**

Independent Finnish watchmaker Stepan Sarpaneva (co-creator of MB&F’s MoonMachine) provided both the initial idea for the large rotor and the name, MEGAWIND. The two 22K gold blades of the iconic MB&F battle-axe rotor on the dial make what is called a ‘mystery’ rotor because, in appearing to be symmetrically balanced instead of having a visibly off-centred mass, they look to defy the laws of physics. This ‘mystery’ is achieved by machining the underside of one of the gold blades to a razor-thin edge, so reducing its mass.

The MEGAWIND Final Edition rotor adds a layer of stealth (by day) and illumination by night: the titanium and 22K white gold rotor is blackened so that it blends seamlessly with the case. When it's dark however, a thick line of Super-LumiNova is alternately revealed and covered by the turning rotor, adding animated bright flashes from the glowing green lume to the glowing indications.

**Ceramic Bearings:**

Time indications are usually located on the top, or dial side, of a movement. As the movement of HM3 is inverted to display its operation, an efficient solution was needed to bring power from the bottom of the movement to the timekeeping cones at the top. Standard pinions set in jewels would have required complex, friction-generating gearing, and would require support top and bottom – a factor which would increase the height of the movement, and thus the watch.

So instead of standard jewelled pinions, HM3 features two large-diameter (15mm) high-tech ceramic bearings. Because of their large diameter, these bearings minimise the number of friction inducing gears and, due to the rigidity resulting from their ultra-high precision design and manufacture, they only require support at one end (the base) so allow for a thinner movement.

**HM3 MEGAWIND Final Edition – Technical Specifications**

**Engine:**

Three-dimensional horological engine designed by Jean-Marc Wiederrecht / Agenhor; based on a Sowind oscillator and gear train

Balance oscillating at 28,800 bph

Automatic winding rotor in 3 parts: hub and arms in blackened titanium with outer sections in blackened 22k gold, fastened with 4 rivets

Time indications transmitted via ceramic ball bearings

Number of jewels: 36 (all functional)

Number of components: 270

**Functions:**

Hours in C3 Super-LumiNova on one cone

Minutes in C3 Super-LumiNova on second cone

**Case:**

Black PVD-treated 18k white gold and titanium

Limited edition of 25 pieces, all numbered "1 in 25"

Screwed-down crown

Dimensions (exclusive of crown and lugs): 47mm x 50mm x 17mm

Number of case components: 52

**Sapphire crystals:**

Sapphire cones and front and back display crystals have anti-reflective treatment on both faces

**Strap & Buckle:**

Black hand-stitched alligator with 18k gold and titanium custom designed folding buckle.

**'Friends' responsible for MEGAWIND**

Concept: Maximilian Büsser / MB&F

Product Design: Eric Giroud / Through the Looking Glass

Technical and Production Management: Serge Kriknoff / MB&F

R&D: Guillaume Thévenin and Ruben Martinez / MB&F

Movement Development: Jean-Marc Wiederrecht / Agenhor

Movement manufacturing: Georges Auer / Mecawatch

Movement base: Stefano Macaluso and Raphael Ackermann / Sowind

Super-LumiNova: Frédéric Thierry / Monyco

Rotor: Denis Villars / Cendres + Métaux Galétan SA and Positive Coating SA

Ceramic ball bearings: Patrice Parietti / MPS

Movement assemblage: Didier Dumas, Georges Veisy, Anne Guiter and Emmanuel Maitre / MB&F

In-house machining: Alain Lemarchand / MB&F

After-Sales service: Florian Courbat / MB&F

Quality Control: Cyril Fallet / MB&F

Case and buckle construction and production: Philippe Marti, Dominique Mainier and Bertrand Jeunet / G.F.Châtelain

Sapphire cones: Jean-Michel Pellation and Gérard Guerne / Bloesch SA

Dials: Maurizio Cervellieri/ Nateber

Strap: Olivier Purnot / Camille Fournet

Presentation case: Isabelle Vaudaux / Vaudaux, Frédéric Legendre / Lekoni

Production logistics: David Lamy and Isabel Ortega / MB&F

Marketing communications: Charris Yadigaroglou, Virginie Meylan and Juliette Duru / MB&F

M.A.D.Gallery: Hervé Estienne / MB&F

Sales: Luis André, Patricia Duvillard and Phillip Ogle / MB&F

Graphic design: Damien Seydoux / MB&F, Adrien Schulz and Gilles Bondallaz / Z+Z

Product photography: Maarten van der Ende

Portrait photography: Régis Golay / Federal

Website: Stéphane Balet and Victor Rodriguez / Sumo Interactive

Texts: Ian Skellern and Steven Rogers / underthedial

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

The projects that gave Maximilian Büsser the most pleasure and personal satisfaction during his 15 years managing prestigious watch brands were those working with talented independent watchmakers. An idea for his own personal utopia emerged: that of creating a company dedicated solely to designing and crafting small series of radical concept watches in collaboration with talented professionals he both respected and enjoyed working with. The entrepreneur in Büsser brought the idea to reality.

MB&F is not a watch brand. It is an artistic and micro-engineering concept laboratory in which collectives of independent horological professionals are assembled each year to design and craft radical Horological Machines. Respecting tradition without being shackled by it enables MB&F to act as a catalyst in fusing traditional, high-quality watchmaking with cutting-edge technology and avant-garde three-dimensional sculpture.

In 2007, MB&F unveiled their first Horological Machine, its sculptured, three-dimensional case and beautifully finished Engine setting the standard for the idiosyncratic Machines that followed – Machines that tell the time, rather than Machines to tell the time. In 2011, MB&F launched their round-cased Legacy Machine collection. These more classical pieces (classical for MB&F that is) pay tribute to 19th century watchmaking excellence by reinterpreting complications from the great horological innovators to create contemporary objets d'art. Since then, MB&F alternate between launching an exciting new Horological Machine and an historically-inspired Legacy Machine.

**Biography – Maximilian Büsser**

Maximilian Büsser was born in Milan, Italy, before moving at an early age to Lausanne, Switzerland where he spent his youth. Growing up in a multi-cultural environment and family – his father was a Swiss diplomat who met his mother, an Indian national, in Mumbai – led Büsser to develop a cross-cultural, broad-based approach to life and to business.

In July 2005, at the age of 38, Büsser created the world’s first horological concept brand: MB&F (Maximilian Büsser & Friends), in which he is now partnered with Serge Kriknoff. Büsser's dream with MB&F is to have his own brand dedicated to developing radical horological concepts by working in small, hyper-creative groups composed of people he enjoys working with.

Entrepreneurship is Maximilian Büsser's forte. In 1998, when only 31, he was appointed Managing Director of Harry Winston Rare Timepieces in Geneva. During his seven years there Büsser developed the company into a fully-fledged and well-respected haute horlogerie brand by developing the strategy, products, marketing and worldwide distribution, whilst integrating design, R&D and manufacturing in house. The results were a 900% increase in turnover and the positioning of Harry Winston as one of the leaders in this very competitive segment.

Maximilian Büsser’s love for high-end horology was nurtured by his first employer, Jaeger-LeCoultre. During his seven years in the senior management team during the 1990s, JLC strongly increased its profile and multiplied its turnover tenfold. Büsser’s responsibilities at Jaeger-LeCoultre ranged from Product Management & Development to Sales & Marketing for Europe.

Büsser graduated in 1991 with a Masters in Microtechnology Engineering from the Swiss Federal Institute of Technology, Lausanne.