**Horological Machine No3 Frog**

MB&F presents Horological Machine No3 Frog. *Haute horlogerie* is (usually) a very restrained and serious business; however one of Maximilian Büsser’s main goals in creating MB&F was to bring a child's sense of awe and playfulness into high-end watchmaking. There is no doubting that with the HM3 Frog series MB&F have certainly achieved that aim… and more!

The protruding eyes of real-life, amphibious frogs enable them to see in many directions without having to turn their head. The bulbous hour and minute domes of HM3 Frog create a similar effect, though in this case it means the wearer can easily read the time from a variety of angles without having to turn his or her wrist.

Rotating domes of this size and shape posed MB&F with a number of technical challenges. The hour and minute domes are machined from solid aluminium, chosen for its optimal strength to weight ratio. The domes weigh in at a micro-light 0.5g. They are milled first from the outside and then the inside to arrive at a paper-thin wall thickness of just 0.28 mm, which reduces their energy requirements to an absolute minimum.

Even the fabrication of the semi-spherical sapphire crystal domes was incredibly demanding and only recently even possible at all. This is due to the fact that any slight imperfection in the sapphire might introduce a disconcerting magnification effect. The sapphire has to be shaped and polished to be perfectly uniform.

The Frog may portray the time in a playful manner, but there is nothing but serious and meticulous attention to detail and care regarding the fine hand-finishing of the highly-tuned, Jean-Marc Wiederrecht-designed engine. A close inspection of the case is rewarded with carefully thought out detailing including a figure 8 engraved around the domes that mirrors the form of the display back (revealing dual ceramic bearings); distinctive clover-head screws; and an engraved arrow discreetly indicating the easy to read over-sized date.

**HM3 Frog Ti** is available in Grade 5 titanium with blue 22k gold battle-axe winding rotor.   
**HM3 Poison Dart Frog** is a limited edition of 10 pieces created exclusively for The Hour Glass, and features black PVD-coated zirconium case, 22k gold rotor and 18k yellow gold screws.

**HM3 Fire Frog** is a limited edition of 10 pieces in 18k red gold and titanium case, 22k red gold rotor and 18k red gold screws.

HM3 Frog: Don't jump to conclusions

**Horological Machine No3 Frog – Technical Specifications**

**Movement:**

Three-dimensional horological engine designed by Jean-Marc Wiederrecht/Agenhor;   
Powered by a Sowind base

Balance oscillating at 28,800 bph.

Battle-axe shaped ‘mystery’ automatic winding rotor.   
HM3 Frog Ti: Rotor in blue PVD 22k gold

HM3 Poison Dart Frog: Rotor in 22k gold

HM3 Fire Frog: Rotor in 22k red gold

Hour and minutes information transmitted via ceramic ball bearings to rotating domes.

Number of jewels: 36 (all functional)

Number of components: 304

**Functions:**

Hour on one dome (aluminium dome rotating in 12 hours)

Minutes on second dome (aluminium dome rotating in 60 minutes)

Date around the movement

**Case:**

HM3 Frog Ti: Grade 5 titanium case and screws

HM3 Poison Dart Frog: Black PVD zirconium case, 18k yellow gold screws, limited edition of 10 pieces

HM3 Fire Frog: 18k red gold and titanium case, 18k red gold screws, limited edition of 10 pieces

Screwed-down crown

Dimensions (exclusive of crown and lugs): 47mm x 50mm x 18mm

Number of case components: 53

**Sapphire crystals**:

Domes and both displays front and back have an anti-reflective treatment on each face.

**Dials:**

Rotating aluminium domes – 0.58g

**Strap & Buckle:**

Black hand-stitched alligator with 18K gold & titanium custom designed deployment buckle

**'Friends' responsible for Horological Machine No3 Frog**

*Concept*: Maximilian Büsser

*Product Design*: Eric Giroud / Eric Giroud Design Studio

*Technical and Production Management:* Serge Kriknoff / MB&F

*R&D:* Guillaume Thévenin / MB&F

*Movement Development:* Jean-Marc Wiederrecht and Nicolas Stalder of Agenhor

*Movement base:* Stefano Macaluso, Raphael Ackermann, Steve Sturchio / Sowind

*Movement fabrication:* Georges Auer / Mecawatch, Salvatore Ferrarotto / APR Quality

*Hand-finishing of movement components:* Jacques-Adrien Rochat and Denis Garcia of

C-L Rochat

*Ceramic ball bearings:* Patrice Parietti / MPS

*Movement assemblage:* Didier Dumas, Georges Veisy, Alexandre Bonnet and Bertrand Sagorin-Querol / MB&F

*Case and buckle construction and production*: Dominique Mainier and Bertrand Jeunet of

G&F.Châtelain

*Sapphire parts:* Martin Stettler / Stettler Sapphire

*Dials*: François Bernhard and Denis Parel of Nateber

*Strap:* Olivier Purnot / Camille Fournet

*Presentation case*: Frédéric Legendre / Lekoni and Isabelle Vaudaux / Vaudaux

*Production logistics:* David Lamy / MB&F

Communication:

*MB&F*:Charris Yadigaroglou, Virginie Meylan, Patricia Duvillard, Eléonor Picciotto and Hervé Estienne

*Graphic Design:* Gérald Moulière and Anthony Franklin of GVA Studio

*Product Photography:* Maarten van der Ende

*Portrait Photography:* Régis Golay / Federal

*Webmasters*: Stéphane Balet and Guillaume Schmitz of Sumo Interactive

*Texts*: Ian Skellern

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

The projects that gave Maximilian Büsser the most pleasure and personal satisfaction during his fifteen 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.

MB&F's first timepiece, HM1 (Horological Machine No1) was delivered from 2007 and introduced the concept of three-dimensional architectural horology. This was followed by HM2 in 2008 and HM3 in 2009, which were both inspired by science fiction. The year 2010 heralded the HM4 Thunderbolt, considered by many to be MB&F's most audacious machine to date. In 2011 Legacy Machine No1 heralded the introduction of a new traditionally-inspired line.

MB&F is independent people creating for independent people.

**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 Bombay – 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 per cent 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 by a factor of ten. 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.