**TRIPOD**

MB&F + L’EPEE 1839

*“Art begets art”*, American author Susan Vreeland once famously said. And this is certainly true in the case of TriPod, the 13th collaboration between MB&F and Switzerland’s premier clockmaker L’Epée 1839.

TriPod comprises a minimalist clock face suspended between three delicate insect-like legs. It follows the mighty T-Rex in what will become a trilogy of half animal/half robot creations that MB&F calls Robocreatures. TriPod’s name originates in the trios that inform it: three legs, three insect-eye spheres, and three movement levels comprising the creature’s mechanical body. Also, TriPod is the second in a group of three clocks set to form a trio. MB&F founder Maximilian Büsser describes Robocreatures; *“In the same way that H.R. Giger created his* Alien *universe, we’re creating our own world of creatures”*.

Robocreatures could well be future time capsules, fossilised “life” from a prehistoric era. With TriPod, Berlin-based designer Maximilian Maertens, L’Épée CEO Arnaud Nicolas, and Büsser lead us into a horological post-modern prehistoric era.

TriPod features three delicate legs supporting a colourful body, three insect-eye spheres made of precision lens-quality glass, and a clock dial making one full revolution in 36 hours that indicates three sets of hours and minutes. Underneath the dial is a 182-component three-dimensional sculptural movement crafted on three levels by L’Épée 1839 with a vertical balance slowly beating at a traditional 2.5Hz (18,000vph). Time-setting and winding are by key, and when fully wound the movement offers a generous eight-day power reserve.

An essential element of TriPod is indicating the time, which is done by looking down on the dial composed of rotating disks. But this clock requires some interaction between Man and Machine: the observer reads the time thanks to three optical spheres, each magnifying the clock’s numerals and making them legible.

To allow all three of the “insect eyes” to show the time from any angle, the dial features three sets of numerals 1-12, meaning that the dial completes a full rotation in 36 hours instead of the customary 12 hours. The time is visible through one of the magnifying lenses at any time.

*“These clocks are our companions”*, says Büsser. *“They live. They tick. They’re like a pet – bringing life into your interior”*. *Jurassic Park* also famously gave us life where there wasn’t… but what came after the dinosaurs? The trio of Robocreatures provides one imaginative possibility.

**TriPod launches in three limited editions of 50 pieces each in neon blue, neon green, and neon red.**

**TRIPOD IN DETAIL**

**The Inspiration**

Young designer Maertens was the creative incubator for TriPod, during his internship at MB&F. The 1993 film *Jurassic Park* was a big influence on Maertens as it was the first movie he remembers watching as a child. While Maertens’ inspiration from his childhood memory was first realized in MB&F’s T-Rex, the first clock in the Robocreature trilogy, it’s been a gift that keeps on giving. Which is apt as the entire premise of all of MB&F’s mechanical masterpieces is to foster children’s dreams as a creative adult.

When designing T-Rex, Maertens imagined a backstory to guide his development process to create a coherent balance of mechanical and organic visual elements. That story grew from elements in MB&F’s past projects that included a starship pilot discovering new planets. As Maertens uncovered further inspiration from his love of *Jurassic Park,* a new story began to unfold that is now the backbone of the Robocreature trilogy.

TriPod represents how time originates for *Jurassic Park. “This insect is the transition between dinosaur and what comes next because they’re all still here”*, says Maertens.

While the primary inspiration for TriPod is the mosquito caught in amber that provides the DNA to genetically craft new dinosaurs, for the clock’s look Maertens decided to emulate a water strider (Gerridae), an insect able to walk on the surface of water using surface tension and its long, slender, hydrophobic legs to distribute its weight over a large surface area.

*“It feels much like a levitating insect walking over the water,”* Maertens explains, *“and this inspired me to create something that looks very delicate. This is a direction I like to go, even if it caused some strife with the engineers over issues like stability”.* TriPod’s three long legs make it seem too fragile to be true, but the balance is so perfectly calculated that the entire creation comes across as elegantly as the insect it’s modelled after.

**Movement and Body**

The 26-cm tall TriPod is made of plated brass and weighs approximately 2.8kg, its mass perfectly distributed over its delicately sculpted legs.

As a sculptural clock, an essential element of TriPod is indicating the time, which is done by looking down on the dial composed of two concentric, rotating disks. The outer disk displays the hour while the inner disk displays the minutes in increments of 15. Reading the time requires interaction between Man and Machine: the observer reads the time thanks to three optical spheres, each magnifying the clock’s numerals and making them legible.

To allow all three of the “insect eyes” to show the time from any angle, the dial features three sets of numerals 1-12, meaning that the dial completes a full rotation in 36 hours instead of the customary 12 hours. The time is visible through one of the magnifying lenses at any time as well as the dial from above (albeit much smaller).

Arnaud Nicolas, CEO of L’Epée 1839, has a master’s degree in optics, so can well explain how making the mineral glass spheres forming the three insect-eye magnifiers was one of the greatest challenges in creating Maertens’ creative vision. *“The precision of the sphere had to be very, very accurate,”* he explains. *“It’s not at all common for a ball-shaped piece of glass to have the tolerance of an optical lens”.*

L’Epée’s engineers calculated the best distance between the dial and the spheres, as well as a size for the spheres that was large enough to allow the time to be seen, but not so large that they would alter the design. In other words, the proportions, the right magnification, and the right distances were tantamount to the success of TriPod. And to get that, the shape of the spheres had to be made very precisely – within 10 microns – as even the tiniest bit of misalignment would change the magnification, making it blurry.

The spheres are suspended by brass “arms” cradling them like hands so as not to disturb their perfectly round shape or scratch them. Nicolas explains that manufacturing these cradles for the lens spheres was difficult to do in one piece, which was necessary to maximise stability.

The protective shields that are the insect’s body are crafted in cast acrylic – offering shock resistance, lightness and optical clarity – in the same three colours that MB&F and L’Épée 1839 had already used for the three variations of T-Rex. Coming in flashy neon green, blue, and red, these translucent shields allow a view of the finely finished clock movement. They also allow the movement to be placed in the middle of the creation to mimic an insect torso and so that the Robocreature is not looking in any one direction, but rather over 360 degrees. TriPod looks the same from every direction, apart from the creature’s visible heart: the movement’s balance. *“These shells, or shields, were inspired by chitin, an insect’s exoskeleton”,* Maertens confirms.

TriPod is powered by a movement completely designed and produced in-house by L’Epée 1839 and finished to the highest standards of traditional Swiss clockmaking. But it’s different than L’Épée 1839’s other movements: *“We designed it to have four plates in order to have three different areas inside the movement in keeping with the TriPod theme”,* Nicolas continues. *“It would have been easier for us to have everything on one layer, but I am really picky: I like to go deep into details when we manufacture something. Even if it’s more complex, we don’t choose the more cost-effective or simpler way; we use the way that makes the most sense”.*

A table clock, TriPod features essentially the same mechanisms as a wristwatch only larger: gear train, mainspring barrel, balance wheel, escape wheel, and pallet lever. L’Epée 1839’s regulator also features an Incabloc shock protection system, something generally only seen in wristwatches, which minimises the risk of damage when the clock is being transported.

One might be tempted to think that the more substantial size of the components simplifies work. However because of the bigger surface areas, finely finishing the movement is much more time-consuming than finishing a wristwatch. Nicolas explains: “Doubling the size of the components requires much more than simply doubling the time to finish them; the complexity increases exponentially...".

For polishing you need to apply the same pressure as you would finishing a watch movement but on a bigger surface, and that’s more challenging. It’s thanks to the experience and dexterity of our clockmakers that TriPod can feature such superlative fine-finishing”.

**TRIPOD: technical specifications**

**TriPod launches in three limited editions of 50 pieces each in neon blue, neon green and neon red.**

**Display**

Hours and minutes are indicated on two concentric dials visible from each of the three optical mineral glass spheres. Dials make one full rotation in 36 hours.

**Body**

Height: approx. 26cm

Diameter: approx. 30cm

Weight: approx. 2.8kg

Number of parts: 95

Materials: plated brass, optical mineral glass, fluorescent acrylic shields

**Movement**

L’Epée 1839 in-house designed and manufactured movement

Balance frequency: 18,000 vph / 2.5Hz

One barrel, power reserve eight days

182 components

Jewels: 21 (11 in the escapement, 10 otherwise in the movement)

Incabloc shock protection system

Manual-winding: double-ended key to set time and wind the movement

**L’EPEE 1839 – the premier clock manufacture in Switzerland**

Dedicated to making high-end clocks, L'Epée has been a prominent Swiss Manufacture for over 180 years. Founded in 1839 by Auguste L’Epée in France’s Besançon region, the company originally focused on producing music boxes and watch components and became synonymous at the time with entirely handmade pieces.

From 1850, L'Epée became a leading light in the production of ‘platform’ escapements, creating regulators especially for alarm and table clocks and musical watches. It became a well-known specialist owning a large number of patents on exceptional escapements and the chief supplier of escapements to several celebrated watchmakers of the day. L'Epée has won a number of gold medals at international exhibitions.

During the 20th century, L'Epée owed much of its reputation to its superlative carriage clocks; for many, the clock of the influential and powerful in addition to being the gift of choice of French government officials to elite guests. In 1976 when the Concorde supersonic aircraft entered commercial service, L'Epée wall clocks were chosen to furnish the cabins, providing passengers with the time. In 1994, L'Epée showed its thirst for a challenge when it built the world's biggest clock with a compensated pendulum, the Giant Regulator, which was recognised by the *Guinness Book of Records*.

L'Epée 1839 is now based in Delémont in the Swiss Jura Mountains, Switzerland. Under the impetus of its CEO Arnaud Nicolas, it has developed an exceptional table clock collection encompassing a full range of sophisticated timekeepers.

The collection is based around three themes:

Creative Art – first and foremost artistic models often developed in partnership with external designers as joint creations. These clocks surprise, inspire, and sometimes even shock the most seasoned collectors. They are intended for those consciously or unconsciously looking for exceptional, one-of-a-kind objects.

Contemporary Timepieces – technical creations with a contemporary design (Le Duel, Duet, etc.) and minimalist, avant-garde models (La Tour) incorporating complications such as retrograde seconds, power-reserve indicators, moon phases, tourbillons, chiming mechanisms, and perpetual calendars.

Carriage Clocks – carriage clocks, also known as “officer’s clocks”. These historical models stemming from the brand’s heritage also feature their fair share of complications including chiming mechanisms, minute repeaters, calendars, moon phases, tourbillons, and more.

All models are designed and manufactured in-house. Their technical prowess, combination of form and function, very long power reserves, and remarkable finishes have become signature features of the brand.

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

Founded in 2005, MB&F is the world’s first-ever horological concept laboratory. With almost 20 remarkable calibres forming the base of the critically acclaimed Horological and Legacy Machines, MB&F is continuing to follow Founder and Creative Director Maximilian 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 the animal kingdom (HM7, HM10).

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, LM Split Escapement and LM Thunderdome broadened the collection further. 2019 marked 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 5 Grand Prix awards from the famous Grand Prix d'Horlogerie de Genève: in 2019, the prize for Best Ladies Complication went to the LM FlyingT, in 2016, LM Perpetual won the Best Calendar Watch award; 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.