**‘Sherman’**

**The little robot with a big superpower**

**MB&F + L’Epée 1839**

It gives us great pleasure to introduce Sherman. He's quite a cute little robot, but to be frank, Sherman doesn't do very much. He doesn't do very much at all.

Sherman doesn't walk, talk, weld cars, or roam Mars. He doesn't try to kill Sarah Connor, help Luke Skywalker, warn Will Robinson, vacuum the floor, star in feature-length films, or enforce the law.

In fact, Sherman really only does two things, but he does both extremely well.

Sherman tells the time. And Sherman makes people smile, which is probably the world's most useful and (emotionally) valuable complication. That's a superpower!

Conceived and developed by MB&F and engineered and crafted by L’Epée 1839 – Switzerland's only specialised high-end clock manufacture – Sherman is the result of Maximilian Büsser’s on-going quest to revisit his childhood, during which he hankered for a robot friend.

Sherman's mechanics are based on a L'Epée 1839 in-line eight-day movement, which ensures that the friendly tank-treaded table clock can display the correct time on his chest for more than a week before requiring rewinding.

But Sherman is not simply a clock inside a robot, but an integral and holistic robot-clock. The mainspring barrel bridge extends down to support his tracks, movement spacers act as shoulders for the arms, and his eyes are bolt heads supporting the regulator. The movement plates and bridges of the clock also make up the skeleton and body of the robot.

The transparent blown mineral glass dome on Sherman's head reveals his mechanical brain, which is actually the regulator controlling the precision of the robot's time. It’s mesmerising to watch the little guy "think".

Sherman's arms can be manipulated into nearly any configuration, and his hands can be used to hold items like a pen or his winding key.

And while Sherman doesn't walk, his rubber caterpillar tracks are fully functional and, with a little help from a friend, he can roll over the rugged terrain of a typical office desk.

But as cool as Sherman's robotic and horological accomplishments are, they pale in comparison with his emotional superpower of spreading happiness wherever he goes.

*“A long time ago in a galaxy far, far away, man’s best friend was his robot,”* says Büsser. *“As a ten-year-old fan of Star Wars, I knew that Luke Skywalker could never have prevailed had it not been for droids like R2-D2 – a loyal, resourceful, and brave robot who was always saving his friends. As an only child, I imagined having my own robot companion and Sherman (like Melchior before him) makes that childhood fantasy a reality.”*

**Sherman is launched in limited editions of 200 palladium (plated) pieces, 200 gilded pieces (gold-plated) and 50 diamond-set gilded pieces.**

**Sherman in detail**

**Sherman's timekeeping**

Working from designs supplied by MB&F, L’Epée developed Sherman's body using its eight-day, in-line movement as a structural base.

Located under the transparent dome of Sherman's head, the movement’s regulator – consisting of the balance and escapement – features an Incabloc shock protection system to minimise the risk of damage when the robot is moving or being transported. While shock protection is standard in wristwatch movements, it is more unusual in generally immobile clocks. But then Sherman is no normal clock; he is a robot with a mission: to make the world a happier place.

Sherman's movement features the same type of superlative fine finishing found on the finest wristwatches, including Geneva waves, anglage, polishing, sandblasting, and circular and vertical satin finishing. However, finely finishing a clock movement is far more challenging than finishing a wristwatch because of the greater surface areas of the larger components.

**Sherman's superpower**

Sherman may be small for a robot, but he has an incredibly powerful superpower: the ability to spread happiness and to make people smile. Sherman's superpower is so dominant because smiling is contagious (one person with a grin sets off a fast-spreading chain reaction); reduces stress and anxiety; releases endorphins, dopamine, and serotonin (our body's natural mood-enhancing chemicals); strengthens the immune system (by increasing the number of white blood cells); makes us more approachable; lowers the heart rate and relaxes the body; makes us look younger; increases longevity; and makes us more attractive to others.

While Sherman isn't, nor does he claim to be, a qualified doctor, he does have the ability to make all those who come in contact with him happier and healthier. That's a power possessed by very few robots… and even fewer clocks.

**Sherman's name**

Sherman's name – as his continuous tracked undercarriage hints at – is derived from the prolific M4 Sherman tank used by the USA and its allies in World War II. Despite being technically surpassed by larger and more powerful tanks toward the end of the war, the Sherman tank proved to remain effective because it was extremely reliable and easy to produce. Better to have lots of smaller tanks in action than smaller numbers of larger, more complex tanks sitting in the garage.

Officially called the Medium Tank M4; it was dubbed the Sherman M4 by the British, who named it after General William Tecumseh Sherman. Sherman rose to command the Western Union army (succeeding General Ulysses S. Grant) during the American Civil War (1861 - 1865) and then headed the American army when Grant assumed the presidency.

British military historian B. H. Liddell Hart called Sherman "the first modern general".

While the name of Sherman may have originated in a war scenario, he is most definitely a robot of peace. Sherman is fitted with the most powerful weapon of all: the ability to spread happiness and unabashed joy.

**Sherman: Technical Specifications**

Sherman is launched in limited editions of 200 palladium (plated) pieces, 200 gilded pieces (gold-plated) and 50 diamond-set gilded pieces.

**Display**

Hours and minutes displayed on Sherman's chest

**Size**

Dimensions: 143 mm tall x 109 mm wide x 80 mm deep

Weight: 0.9 kg

**Body/frame**

Options: Fully palladium-plated (polished silver colour); gold-plated with palladium-plated going train (gearing) and nickel-plated balance wheel; and fully gold-plated body and movement, gem-set with 735 high quality VVS diamonds around the eyes, hour markers and head.

Dome/head: blown mineral glass

**Movement**

L’Epée in-house designed and manufactured in-line eight-day movement

Balance frequency: 2.5 Hz / 18,000 bph

Power reserve: 8 days

Components movement: 148

Jewels: 17

Incabloc shock protection system

Movement finishing: Geneva waves, anglage, polishing, sandblasting, circular and vertical graining, satin finishing

Winding: double-depth square socket key sets time and winds movement at back of clock

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

***10 years old, 11 calibres, countless highs, boundless creativity***

In 2015, MB&F celebrated its 10th anniversary – and what a decade it has been for the world’s first ever horological concept laboratory: 10 years of hyper-creativity; 11 remarkable calibres forming the base of the critically acclaimed Horological Machines and Legacy Machines for which MB&F has become renowned.

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: HM2, HM3, HM4, HM5, HM6 and HMX – all Machines that tell the time, rather than Machines to tell the time.

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. The year 2015 saw the launch of Legacy Machine Perpetual featuring a fully integrated perpetual calendar. MB&F generally alternates between launching contemporary, resolutely unconventional Horological Machines and historically inspired Legacy Machines.

As well as Horological and Legacy Machines, MB&F has created space-age music boxes (MusicMachines 1, 2 and 3) in collaboration with Reuge; unusual clocks in the form of a space station (Starfleet Machine) and a spider (Arachnophobia); as well as two robot clocks (Melchior and Sherman).

And there have been distinguished accolades reminding us of the innovative nature of MB&F’s journey so far. To name a few, at the *Grand Prix d'Horlogerie de Genève* in 2012, MB&F was awarded the Public Prize (voted for by horology fans) and the Best Men’s Watch Prize (voted for by the professional jury) for Legacy Machine N°1. At the 2010 *Grand Prix d'Horlogerie de Genève*, MB&F won Best Concept and Design Watch for the HM4 Thunderbolt. Last but not least, 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.

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

For over 175 years, L'Epée has been at the forefront of watch and clock making. Today, it is the only specialised manufacture in Switzerland dedicated to making high-end clocks. L'Epée was founded in 1839, initially to make music box and watch components, by Auguste L’Epée who set up the business near Besançon, France. The L’Epée hallmark was that all parts were made entirely by hand.

From 1850 onwards, the manufacture became a leading light in the production of ‘platform’ escapements, creating regulators especially for alarm clocks, table clocks and musical watches. By 1877, it was making 24,000 platform escapements annually. The manufacture became a well-known specialist owning a large number of patents on special escapements such as anti-knocking, auto-starting and constant-force escapements and the chief supplier of escapements to several celebrated watchmakers of the day. L'Epée has won a number of gold awards at International Exhibitions.

During the 20th century, L'Epée owed much of its reputation to its superlative carriage clocks and, for many, L'Epée was the clock of the influential and powerful; it was also the gift of choice by 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 visual feedback of the time. In 1994, L'Epée showed its thirst for a challenge when it built the world's biggest clock with compensated pendulum, the Giant Regulator. At 2.2m high, it weighs 1.2 tons – the mechanical movement alone weighs 120kg – and required 2,800 man-hours of work.

L'Epée is now based in Delémont in the Swiss Jura Mountains. Under the guidance of CEO Arnaud Nicolas, L’Epée 1839 has developed an exceptional table clock collection, encompassing a range of sophisticated classic carriage clocks, contemporary design clocks (Le Duel, La Tour…) and avant-garde horological sculptures (Sherman, Starfleet Machine, Arachnophobia…) launched since the celebration of its 175th anniversary, is intended to shock, evoke and inspire people, not to toe the line. L’Epée clocks feature complications including retrograde seconds, power reserve indicators, perpetual calendars, tourbillons and striking mechanisms – all designed and manufactured in-house. Ultra-long power reserves have become a signature of the brand as well as superlative fine finishing.