











**REVELATION**

CRÉATIONS HORLOGÈRES D'EXCEPTION

UNTIL now, the watchmaking universe has been divided into two opposing and very separate worlds: one of the skeleton watch which reveals the mechanism's functions, and that of

creates a hierarchy to read the secondary displays.

With its patent for "a watchmaking piece with a modular display," REVELATION paves the way for a new di-

# THE ORIGINAL CONCEPT

## A NEW CHAPTER IN WATCHMAKING

the watch dial which focuses on reading the time.

REVELATION has succeeded in marrying these two apparently incompatible notions thanks to a unique patented invention.

This invention transforms a black dial into a transparent one by using an ingenious optical system. This original mechanism reveals not only the calibre but also

reception in watchmaking by offering Haute Horlogerie enthusiasts the possibility of wearing not one but two watches on their wrist at the same time, and of switching at will from the skeleton version to the traditional watch while keeping it on the wrist.



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Production of the discs in the clean room

THE “miraculous” transformation from a black to a transparent display is made possible by an optical property called “polarisation.” Polarisation enables light rays to be channelled and

Consequently, the design of the cases is an equally unprecedented undertaking, since they represent genuine technical complications in their own right.

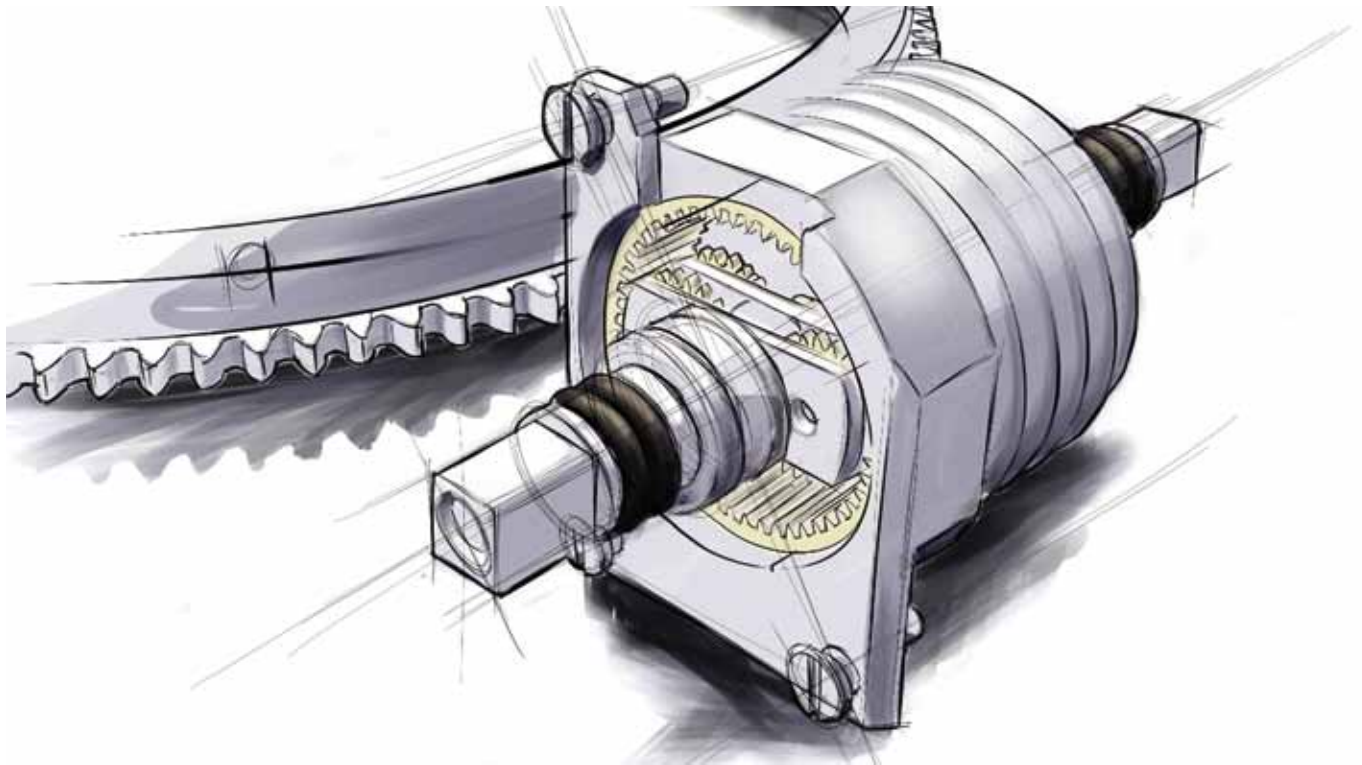
# THE REVELATION SYSTEM<sup>®</sup>

## AN ORIGINAL WATCHMAKING COMPLICATION

directed via filters with a nanometric structure that was specifically designed for this purpose.

The major technical challenge of the REVELATION SYSTEM<sup>®</sup> resides in the interaction between the case elements and the movement components.

In the DOUBLE COMPLICATION line, the REVELATION SYSTEM<sup>®</sup> is housed between the lugs. A secret trigger opens the bezel and reveals the TOURBILLON MANEGE<sup>®</sup>.



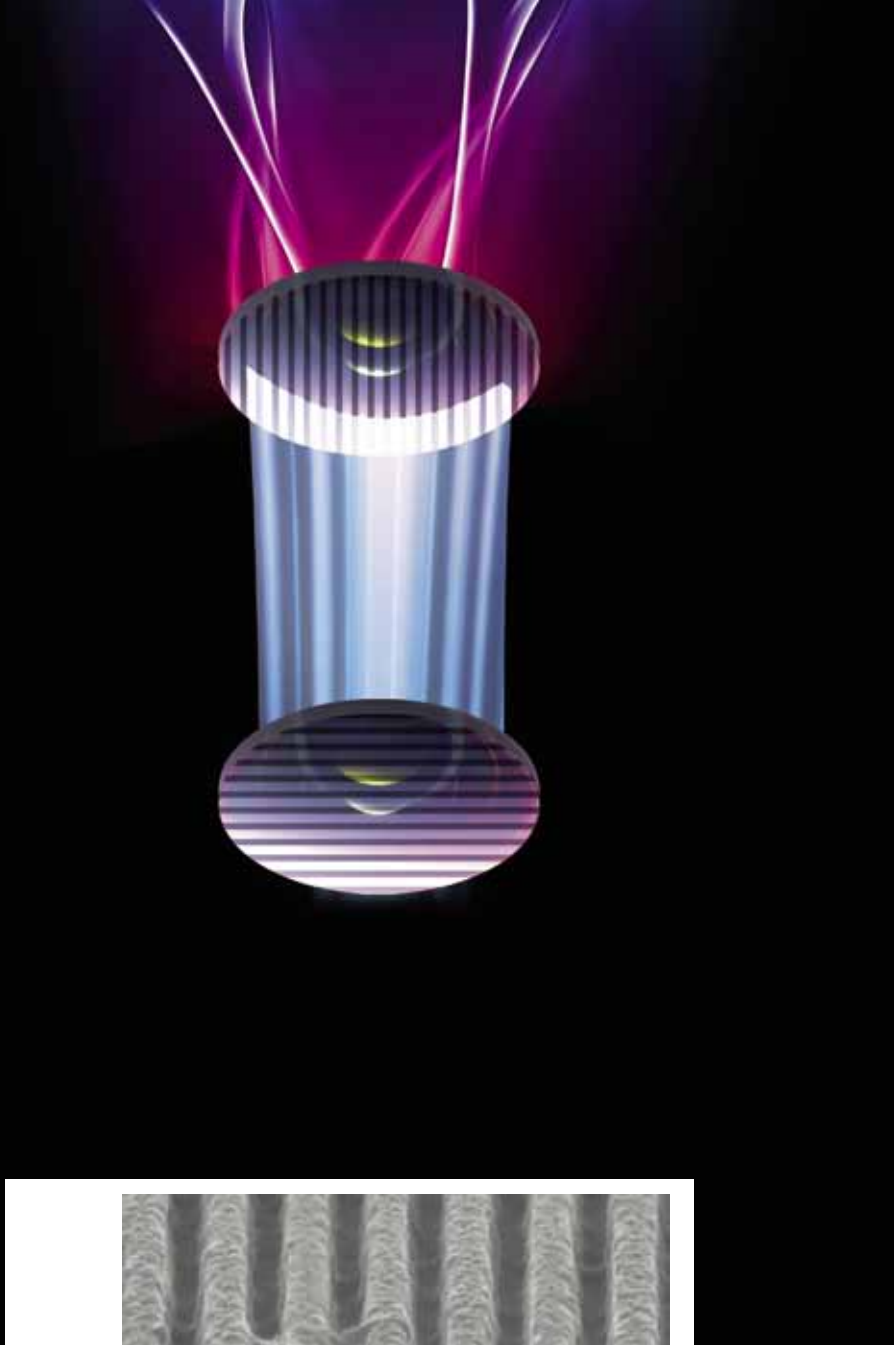
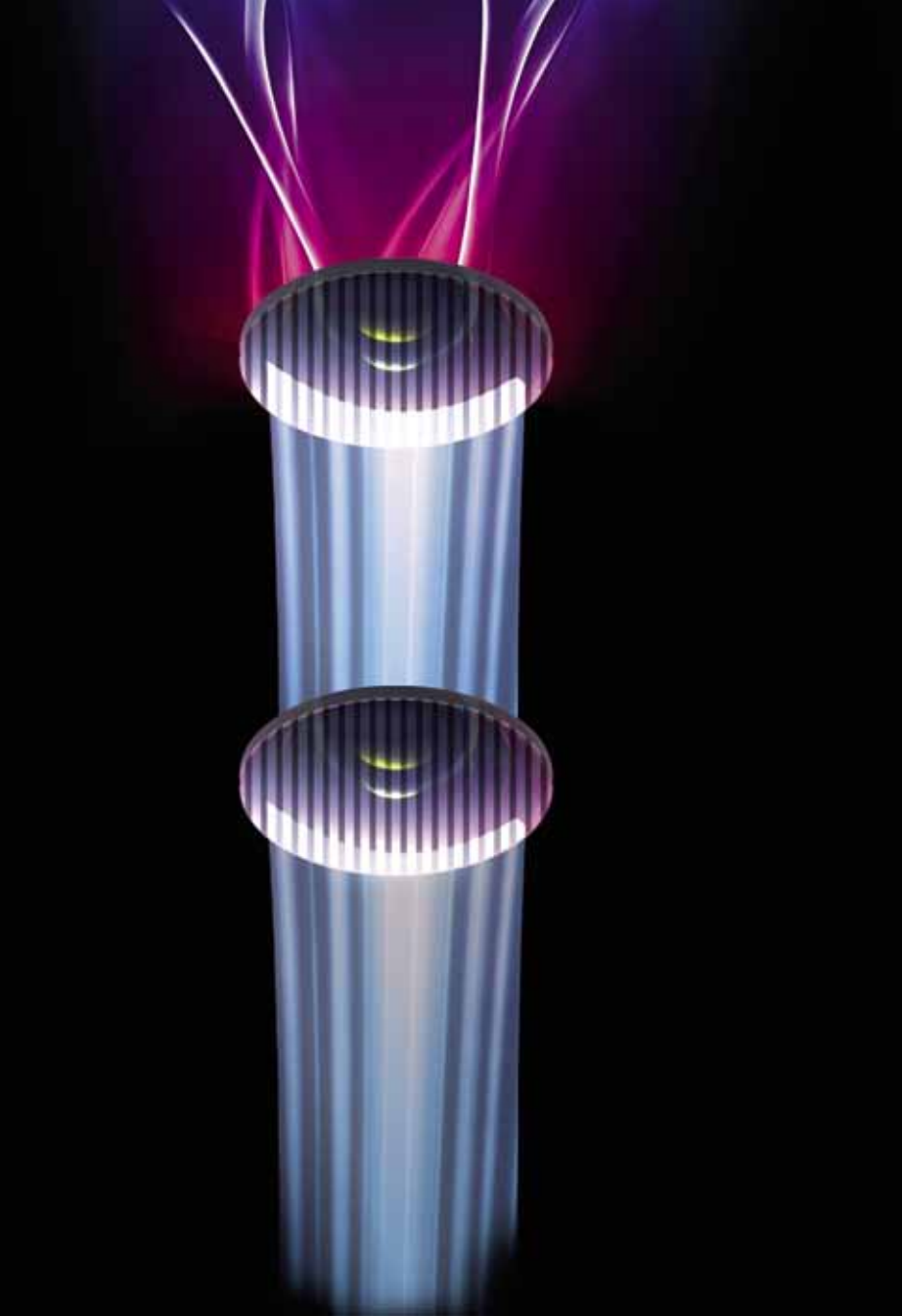




In the CHRONOGRAPHE MAGICAL WATCH DIAL line, the REVELATION SYSTEM® is housed in the rotating bezel.

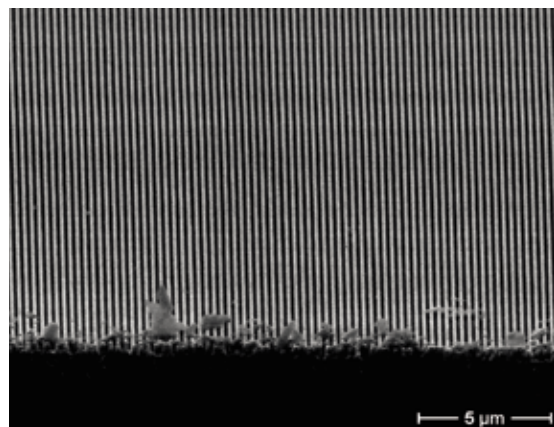
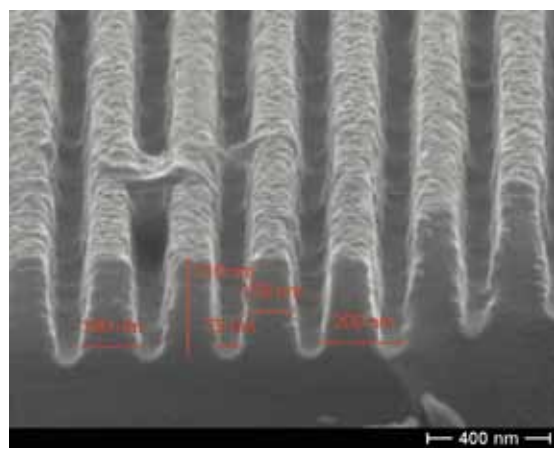
As with the historical model, it is composed of several pinions and a toothed wheel coupled with the mobile polarising disc. In this model however, the system is placed in the vertical versus the horizontal position as the bezel must be rotated to reveal the skeleton movement and the date display.





THE REVELATION dial is composed of two optical discs, with nanometric structures shaped like tridimensional grooves playing the role of shutter slats that are invisible to the naked eye. According to their position, the nanostructures either block the light or let it pass so as to reveal the movement along with the secondary watch functions.

REVELATION entrusted the production of the polarising discs to the renowned Swiss Center for Electronics and Microtechnology (CSEM).





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The REVELATION SYSTEM®, an original watchmaking complication



THE REVELATION SYSTEM® is comprised of a worm or Archimedes' screw, coupled with a double differential that drives a ring upon which one of the polarising discs is mounted.

One of the world's oldest mechanical principles, discovered more than 2200 years ago, thereby rubs shoulders with one of today's most innovative optical technologies. The alliance between past and future perfectly illustrates the REVELATION philosophy reflected in the brand logo.



REVELATION



# REVELATION MOVEMENTS

COMPLICATION AND CHRONOGRAPH





**F**EW watchmaking brands are able to possess their own “Manufacture” or in-house movement, as only a few companies actually master the production of all watch components.

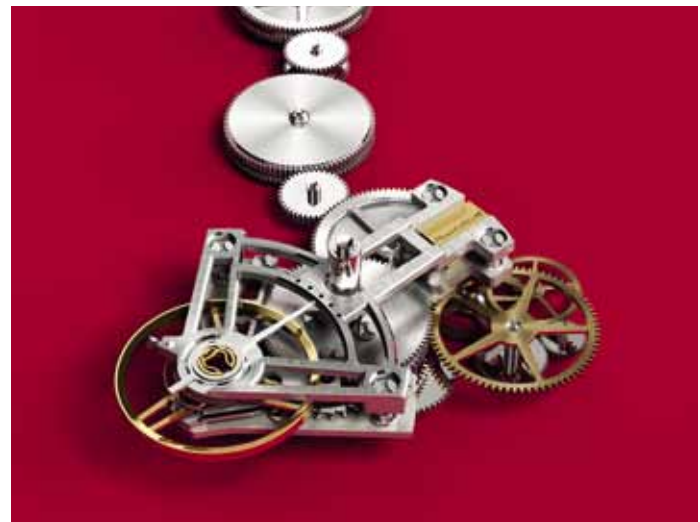
For its TOURBILLON MANEGE® powering the R01 DOUBLE COMPLICATION and R02 HAUTE HORLOGERIE collections, REVELATION decided to work from its base in Lully-sur-Morges to manage the supply and oversee the production of more than 360 components, provided by at least 40 subcontractors based in the Jura region. These partners represent the full range of watchmaking professions and skills.

REVELATION thereby ensures not only its autonomy in terms of supply, but also the quality required to create such an Haute Horlogerie movement.

The TOURBILLON MANEGE® is a unique complication. Like the traditional Breguet tourbillon and the Karousel, the TOURBILLON MANEGE® belongs to the prestigious family of rotating regulating organs. However, its specificity lies in the exact positioning of the escape-pinion, the lever and the balance. All elements of the regulating system are mounted on a flying mobile bridge: the TOURBILLON MANEGE® bridge.



Escapement







An 18kt gold ingot mounted on the far end of the bridge serves as a counterweight to the regulating system fixed on the opposite end, thus ensuring optimal operation by achieving a subtle balance. This assembly method leaves a considerable amount of space for the balance.

Making the most of this volume, the two founders designed a distinctive balance featuring three pairs of spokes. This allows the heart of the TOURBILLON MANEGE® to beat at the rate of 21,600 vibrations per hour.

Thanks to its four series-coupled barrels, this hand-wound movement boasts a guaranteed power reserve of 48 hours.



**T**HIS unique assembly was named "Manège" by the creators, because just as in a fairground attraction or carousel, where cars and horses are mounted on a rotating platform, all components of the regulating system are mounted on this unique element with its unmistakably recognisable design.

This platform is held between two wheels that are mounted on the central axis of the piece. This system, which is truly unique in the field of watch construction and similar in function to a fourth wheel, transmits the force supplied by four barrels through a conventional going train. The wheel torque maintains the rotation of the

TOURBILLON MANEGE®, which has been calculated to last one minute, thereby compensating, just as in a traditional Tourbillon mechanism, for gains or losses in rate.

The design of a "Manufacture" movement is a monumental task, which explains why so few brands accepted the challenge that REVELATION set for itself in the development and production of its own TOURBILLON MANEGE®.



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## TM01 Calibre

Power reserve: 48 hours  
Jewelling: 44 jewels  
Vibrations: 21,600 vibrations per hour  
Diameter: 34 mm  
Thickness: 6 mm



FOR the chronograph line, REVELATION chose to equip its R03 watch with a movement developed by the company Dubois Dépraz. This family business, established in 1901, has been producing movements for more than a century.

The two entities worked together to personalise the chronograph function of the R03 CHRONOGRAPHE MAGICAL WATCH DIAL line. The hand-fitting heights were designed to ensure the smooth integration of the REVELATION SYSTEM® within the movement. The date system and the oscillating weight of this self-winding movement were de-

signed by REVELATION.

The appearance of this distinctive oscillating weight is reminiscent of the “Manufacture” TOURBILLON MANEGE® movement and is clearly representative of the brand. The oscillating weight is also entirely finished by hand, as indeed are the bridges of the complication.





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## CH01 Calibre

Automatic chronograph  
Power reserve: 42 hours  
Jewelling: 61 jewels  
Vibrations: 28,800 vibrations per hour  
Diameter: 30 mm  
Thickness: 7.10 mm





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## CUSTOMISED SCREWS

The design of the REVELATION screws is exclusive to the brand and a patent has been duly filed to protect it. The screw slots are butterfly-shaped – a decision ensuring perfect gripping while avoiding any screwdriver marks when assembling and dismantling the movement in the workshop.



### “HAUTE HORLOGERIE” DECORATION

Within the watch industry, only exceptional calibres are decorated by hand. Bevelling and chamfering, straight graining, as well as polishing the jewel sinks, are all delicate operations that contribute to the value of a complicated model. Thanks to their cut-out shapes featuring interior angles, the bridges of the TOURBILLON MANEGE® are truly unique. This is a particularly delicate and time-consuming operation. The TOURBILLON MANEGE® boasts 54 interior angles, calling for entire days of work by an experienced chamferer.







## UNIQUE MAINPLATE

The mainplate is beadblasted and then placed in a special bath that lends it a particular colour. In order to bring out the sparkle of the jewels, they are fitted in a drilled hole that finishes in the shape of a “droplet”.

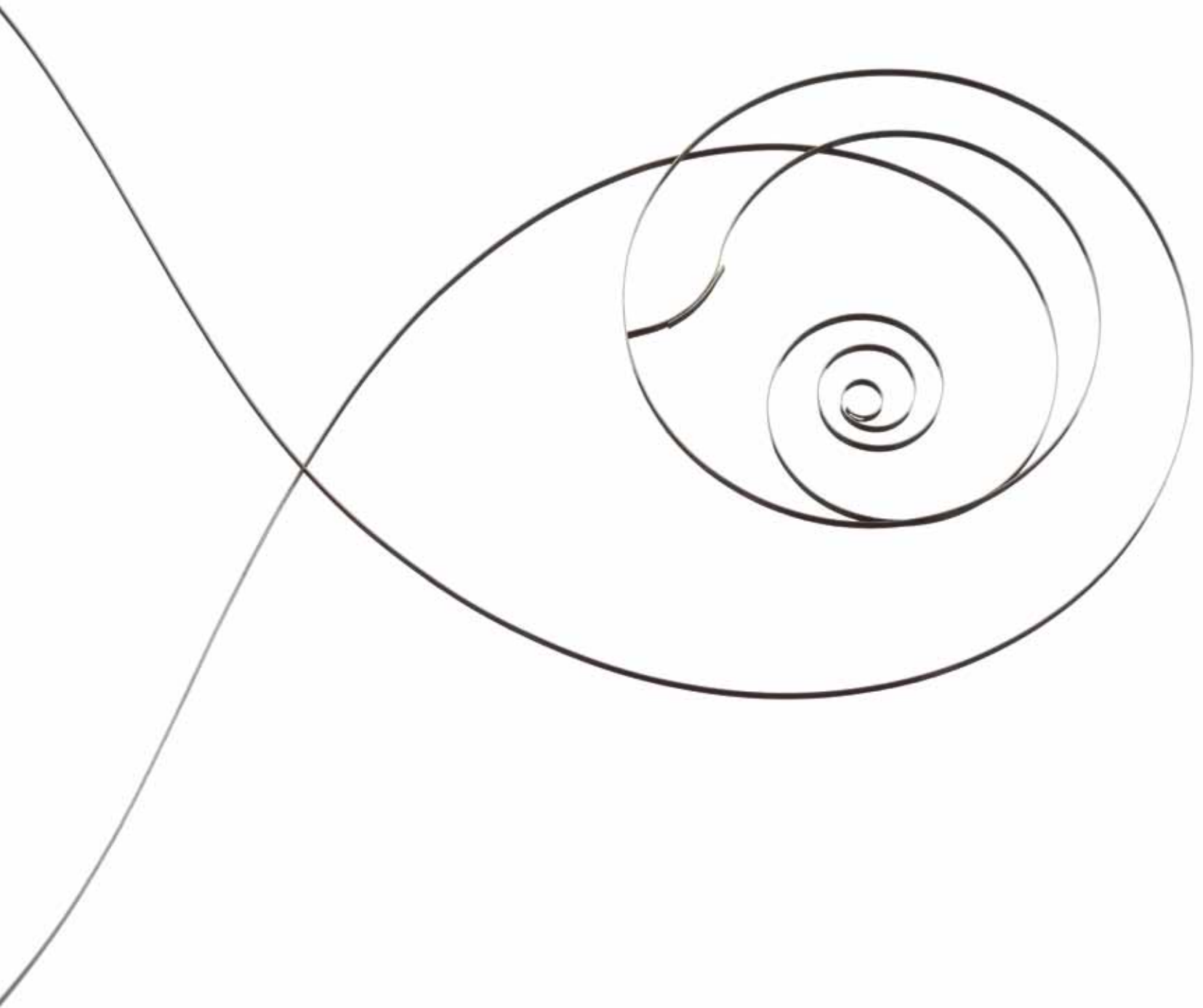


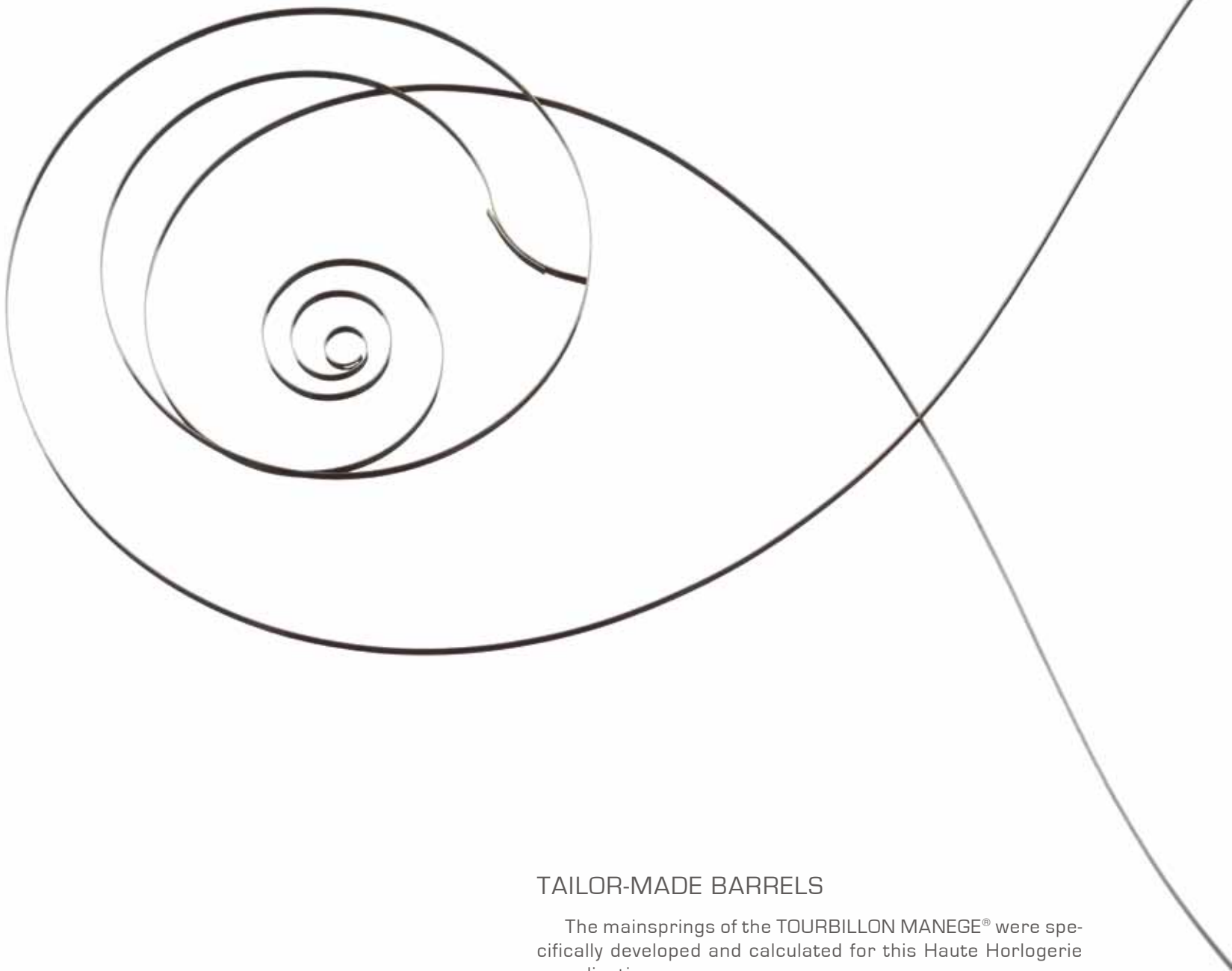


## DISTINCTIVE MACHINING OF THE BRIDGES

The bridges serve to hold the parts placed on the mainplate in their correct positions.

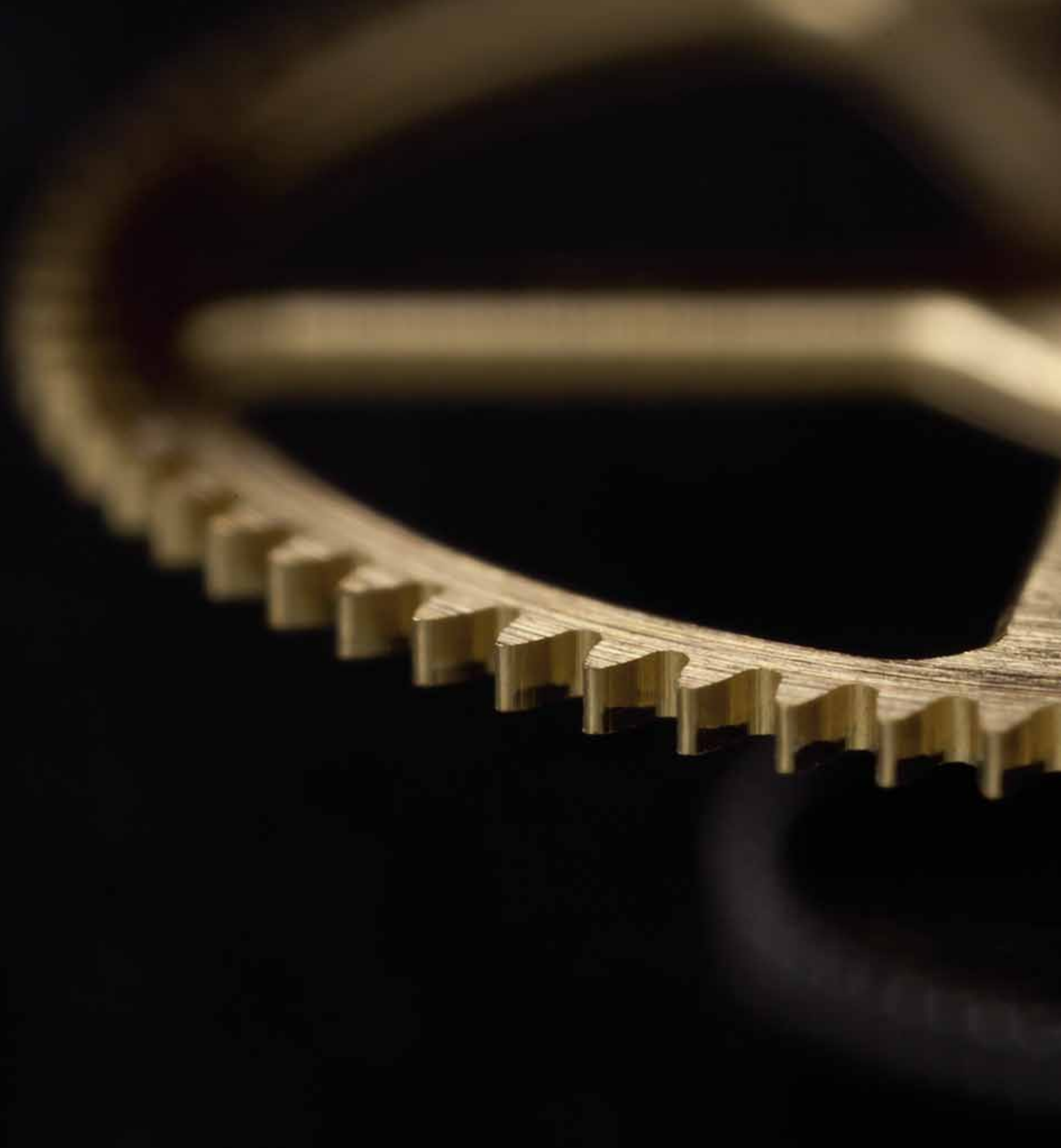
The shape of each bridge was designed by the founders of REVELATION around the axes of the various components of the TOURBILLON MANEGE®: namely the entire going train, various technical components such as pull-out pieces and springs, as well as the escapement.

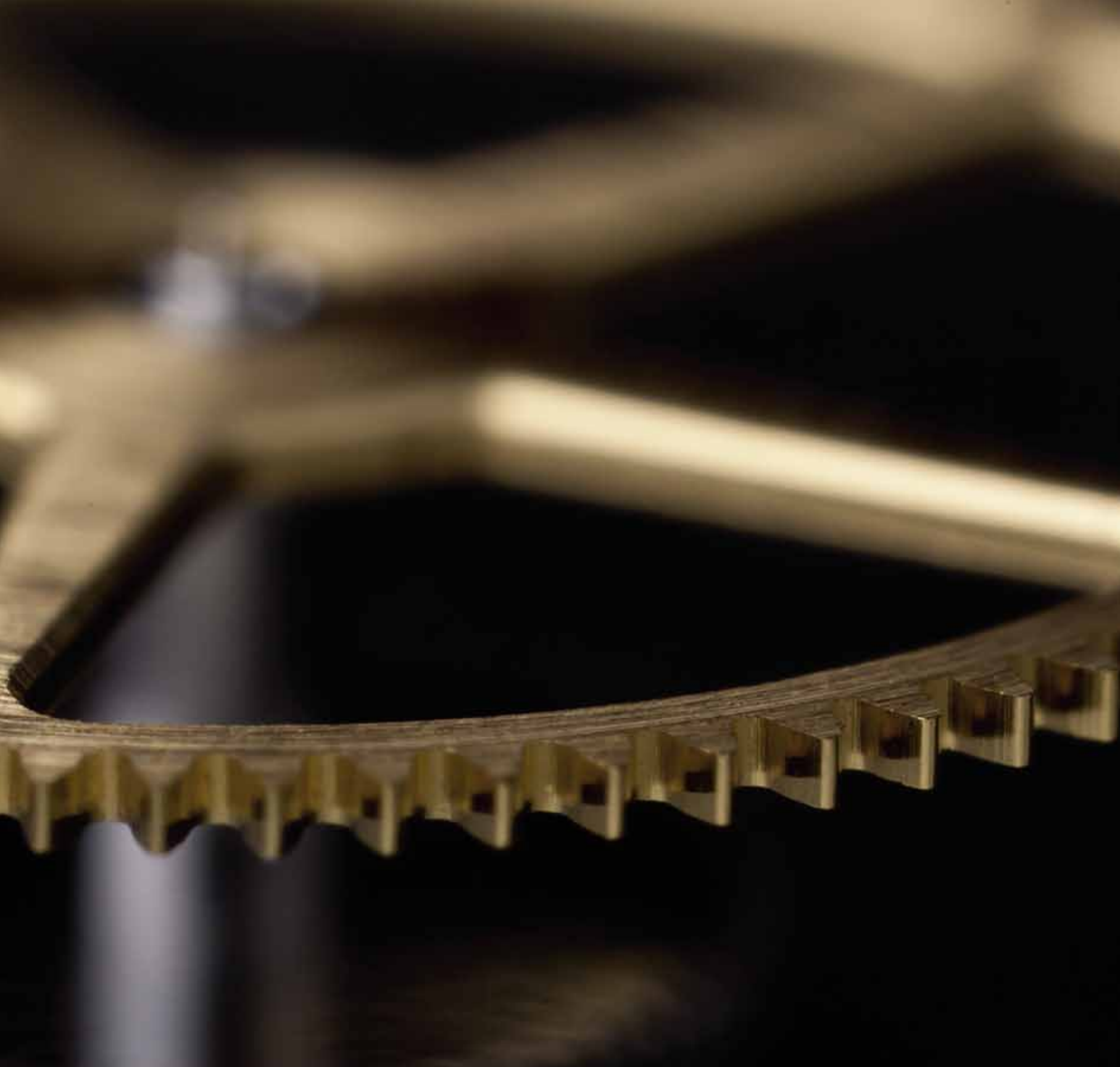




## TAILOR-MADE BARRELS

The mainsprings of the TOURBILLON MANEGE® were specifically developed and calculated for this Haute Horlogerie complication.





1:1



## PERSONALISED GEAR-WHEEL TEETH

The gear-train transmits the energy from the barrels to the regulating organ and enables the hands to indicate the time. To ensure the watch runs at an optimal rate, it is vital that this energy reaches the escapement with the least possible depletion. The teeth of the TOURBILLON MANEGE® feature a distinctive profile that optimises this transmission. Each wheel is machined using a hobbing-cutter serving to machine the teeth following a dedicated curve that reduces friction between the various gears to an absolute minimum.



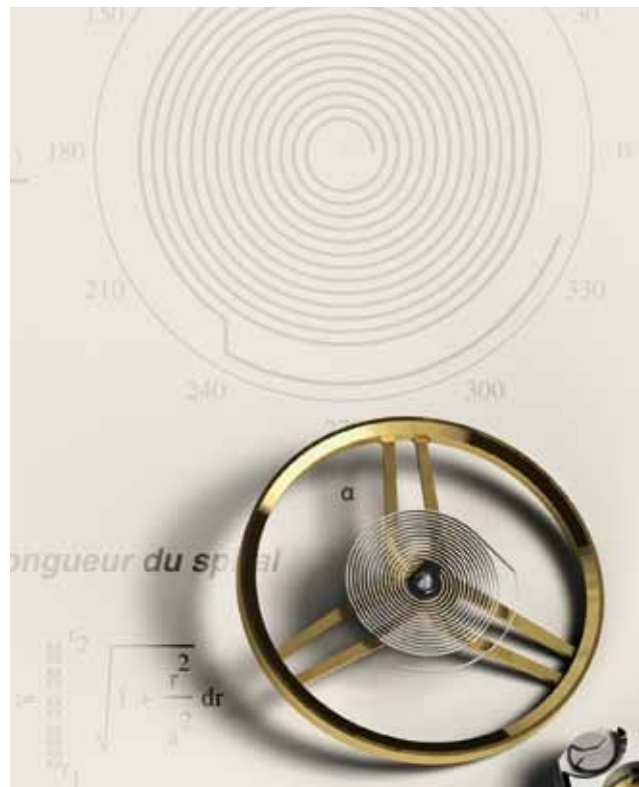
The balance-spring is specially designed for the calibre



## BALANCE-SPRING SPECIFICALLY CALCULATED FOR THE CALIBRE

Together with the balance, the balance-spring composes the regulating organ of the watch. Its technical properties, and in particular its elasticity, are specific to each movement. The balance-spring of the TOURBILLON MANEGE® is cut, rated and adjusted by REVELATION's Master Watchmaker. This hand-crafted work calls for considerable expertise, and only a few specialists still exercise this art of personalised rating.

The balance bears the balance-spring, the oscillations of which impart a regular cadence to the movement going train. Poising it is a crucial step in ensuring the smooth running of the watch. The design of the REVELATION balance with its three pairs of spokes is an unmistakable signature of this "Manufacture" proprietary movement.







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## CUSTOMISED INDEX ASSEMBLY

The index or regulator enables fine adjustment of the rate of the balance-spring once fitted on the balance. REVELATION has designed and developed a unique and recognisable index so that the Master Watchmaker can ensure perfect rating of the regulator, thereby guaranteeing an ideal rate for each calibre emerging from the workshop.

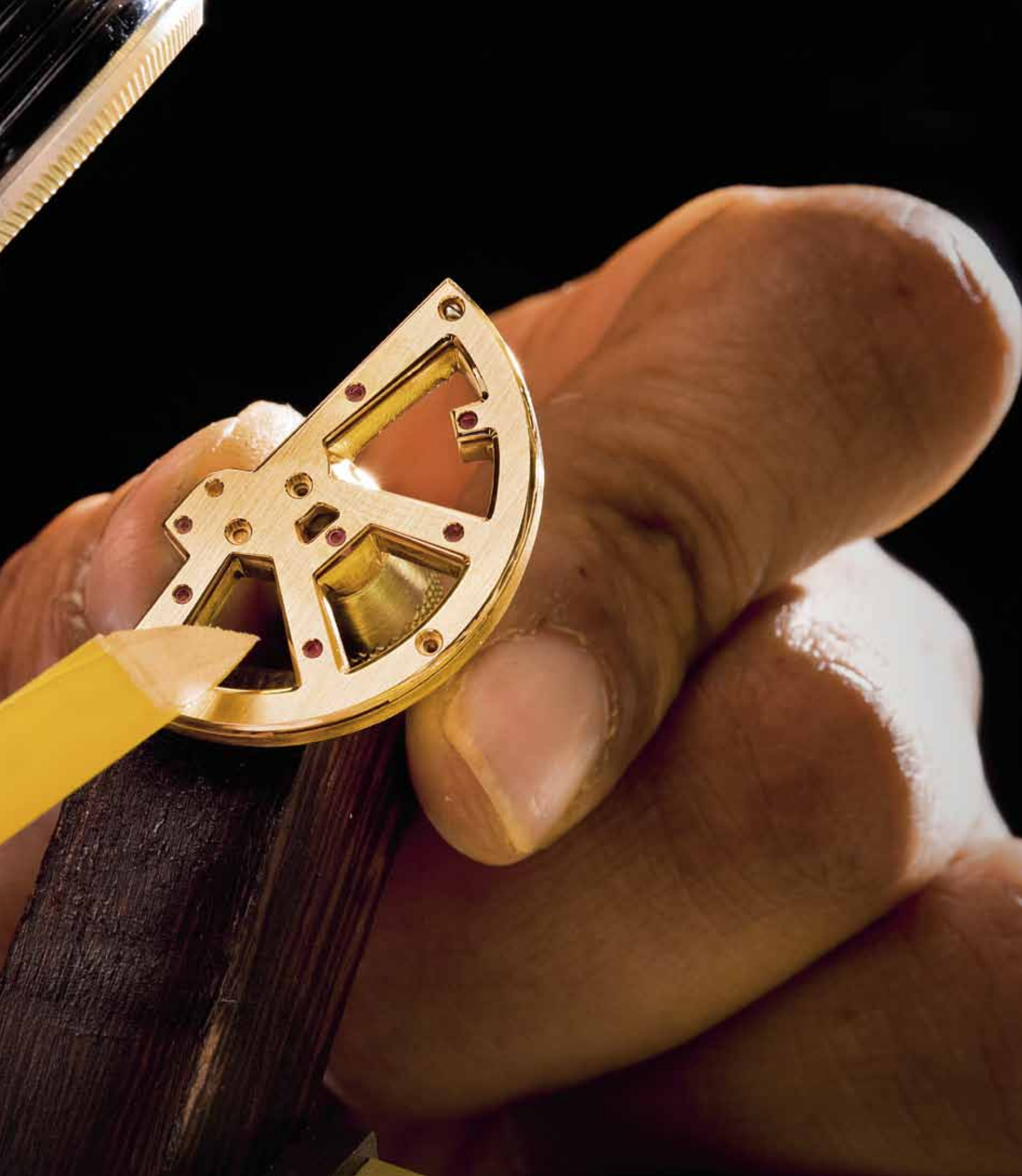
REVELATION

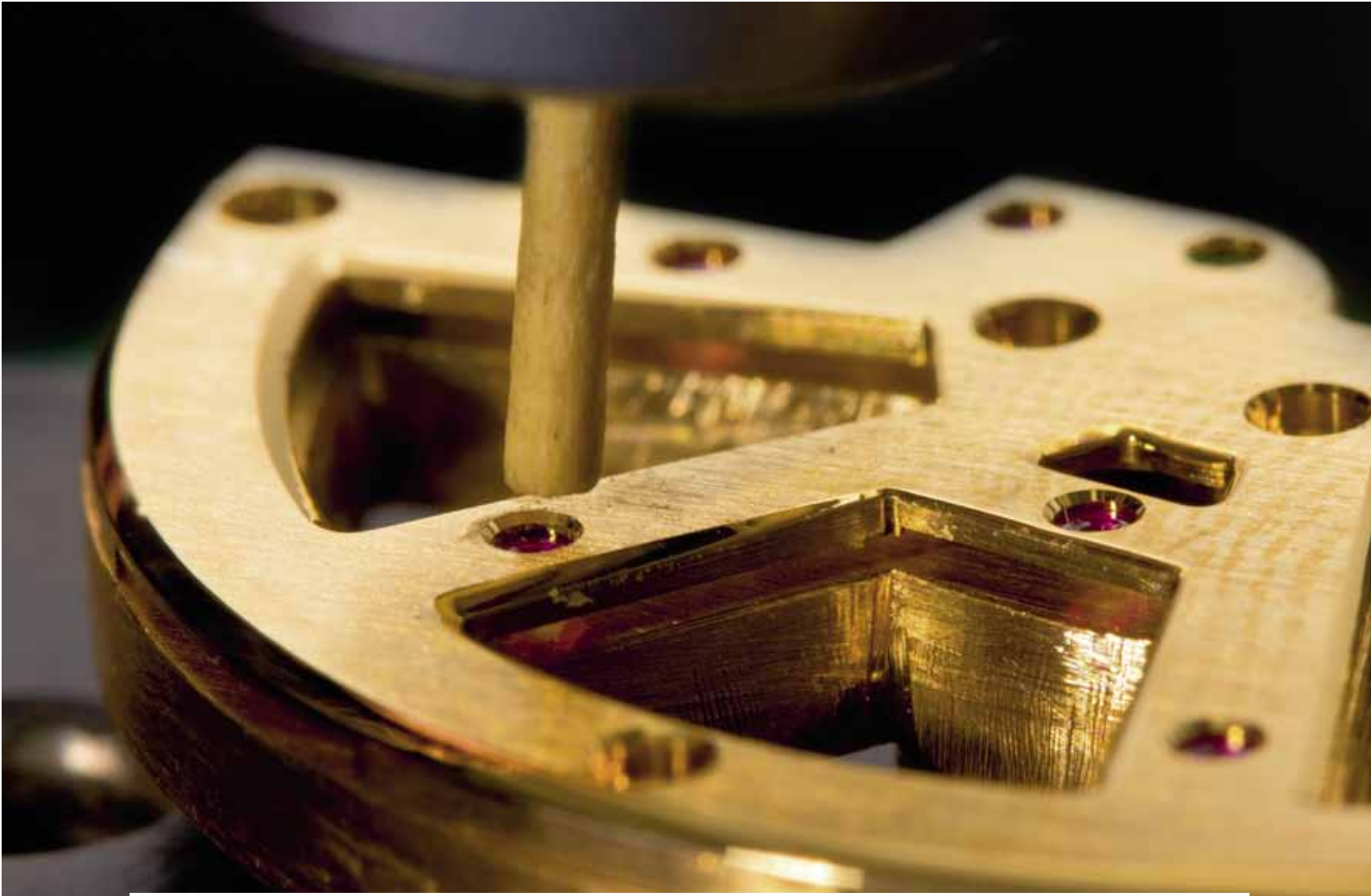


# FINISHING TOUCHES AND DECORATION

THE SIGNATURE OF EXCELLENCE







**A**N “Haute Horlogerie” watch distinguishes itself not only by its technical complexity but also by its aesthetics and the attention to detail that is devoted to each of the components.

Haute Horlogerie finishing touches do not play a dominant role in the functionality of the components, as their main purpose is to exalt the beauty of the mechanical parts. Only a human being can perform such finishing, which takes a considerable amount of time – which explains why watchmakers reserve this level of finish for their most prestigious watches.

REVELATION watches live up to their prestigious signature through the sophisticated finishing of both their cases and movements, and the same goes for the fully hand-crafted watch-

bands, folding clasps and presentation box.

Each part of the in-house “Manufacture” movement TOURBILLON MANEGE® is finished, polished and bevelled by hand, notably the bridges designed by the founders with their 54 interior angles which are impossible to bevel by machine. The flanks of the parts are all reworked and adorned with hand-drawn file strokes, also known as straight graining. As for the wheels, they are sunray finished and immersed in a special bath that gives it a yellow or gold colour depending according to the designer’s choice. The REVELATION screws identifiable by their butterfly design are polished to ensure a beautiful sparkle once they are set in the movement or the case.



Bevelling of the seconds bridge



Final step of polishing the bridges



THE finishing of the REVELATION cases represents a challenge for the chamferer. Each surface is finished differently, as polished and satin-brushed effects rub shoulders with straight graining and beadblasting. Each of the four pins securing the carrier or base to the case middle are separately finished and adjusted. This high-quality treatment is also lavished on the folding clasps.

At each stage of the decoration, this delicate work involves the inevitable risk of damaging one of the components and therefore rendering it unusable, which would mean starting the process all over again. There are 365 parts in the TOURBILLON MANEGE®.

REVELATION watches are produced entirely in Switzerland, which entitles them to bear the “Swiss made” label. The law stipulates that in order for a watch to be considered Swiss, it must use a Swiss movement. According to article 2 OSM, *a movement*

*is considered Swiss if it has been assembled and controlled by the manufacturer in Switzerland and if at least 50% of the value of all the parts that make up the movement, excluding the assembly costs, stems from Swiss production.*

Not only can REVELATION legitimately apply the “Swiss made” label to its models, but it actually far surpasses the legislation and could even lay claim to a “controlled appellation of origin,” since all movement components are produced in Switzerland, in addition to the case, the entire REVELATION SYSTEM® as well as the folding clasps, the hands and the dials.





Decoration of the case pins



A timepiece for eminent collectors. The R01 timepiece is the original historical model conceived by the founders. At first glance, the watch is recognizable by the 4 pins on the lugs securing the carrier to the case middle.

veals its true nature once one actuates the spring catch discreetly integrated within the case middle. It serves to open the bezel and unveil the TOURBILLON MANEGE®, previously hidden from inquisitive eyes.

# THE COLLECTION

## R01 DOUBLE COMPLICATION

Since the design of the model flows from the functionality, the design of the R01 is unique in its kind.

The thickness of the case, its water resistance, the volume of the REVELATION SYSTEM®, and its positioning in respect to the movement and the hands represent a number of technical constraints that had to be addressed in order to achieve genuine aesthetic harmony.

In keeping with the tradition of secret watches and as a tribute to the talent of the master-watchmakers of yesteryear, the R01 DOUBLE COMPLICATION only re-

The R01 DOUBLE COMPLICATION collection is interpreted through four models. The watches come in a choice of black PVD-coated titanium, in 18kt yellow gold, in 18kt pink gold and black PVD-coated pink gold, as well as in 18kt white gold. The cases which are also produced in these materials are numbered and of a limited series from 1 to 15.

The leather strap is pre-formed with special inserts to ensure a perfectly comfortable feel on the wrist, while a personalised folding clasp sets the finishing touch to this horological gem designed for Haute Horlogerie connoisseurs.



R01. TM01. 3N. A0001



R01. TM01. 5N. A0001



R01. TM01. P1. A0001



R01. TM01. T2. A0001

REVELATION





Case: 45 mm in diameter, 15 mm thick  
Water resistance: 3 ATM  
Movement: 33 mm in diameter, 7.00 mm thick  
Jewels: 44  
Vibrations: 21,600  
Power reserve: 48 hours





THE R02 HAUTE HORLOGERIE model was specially created for connoisseurs of horological complications and technological feats. It is the first in the lineage of "Haute Horlogerie" collec-

The R02 HAUTE HORLOGERIE collection is currently available in three versions providing a choice of 18kt yellow gold, pink gold or white gold.

The black Barenia genuine calfskin

# THE COLLECTION

## R02 HAUTE HORLOGERIE

tions stemming from the original model, the R01.

The heart of the R02 HAUTE HORLOGERIE model beats thanks to the "Manufacture" proprietary TOURBILLON MANEGE®. The transparent sapphire dial reveals the movement in operation and the TOURBILLON MANEGE® making one full turn per minute.

strap is silky to the touch. It is especially comfortable to wear thanks to the two inserts that were specially created to perfectly hug the wrist. It is mounted on a gold folding clasp of which the cover is engraved with the name "REVELATION."





R02. TM01. 5N. A0001



R02. TM01. 3N. A0001



R02. TM01. P1. A0001





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Case: 45 mm in diameter, 14 mm thick  
Water resistance: 3 ATM  
Movement: 33 mm in diameter, 7.00 mm thick  
Jewels: 44  
Vibrations: 21,600  
Power reserve: 48 hours





A chronograph that is unique in the world.

The R03 CHRONOGRAPHE MAGICAL WATCH DIAL inaugurates the sports collection based on the brand's

appear simply at a quarter-turn of the bezel.

The R03 CHRONOGRAPHE MAGICAL WATCH DIAL collection is currently available in stainless steel. The movement and

# THE COLLECTION

## R03 CHRONOGRAPHE MAGICAL WATCH DIAL

founding idea and patented world premiere: the REVELATION SYSTEM®.

In the R03 CHRONOGRAPHE MAGICAL WATCH DIAL, the double differential coupled with an Archimedes' screw is replaced by three pinions that are directly connected to the rotating bezel that is specifically ratcheted for this purpose. The movement and the date mysteriously

hand-finished oscillating weight are visible thanks to a sapphire crystal on the case-back.

Each watch is available with the hand-sewn REVELATION strap in black Barenia calfskin, equipped with a REVELATION folding clasp.



R03. CH01. ST. A0001



R03. CH01. ST. A0001



R03 Chronograph with dial in the closed position

**Case:** 45 mm in diameter, 14 mm thick  
**Water resistance:** 3 ATM  
**Movement:** 30 mm in diameter, 7.10 mm thick  
**Jewels:** 61  
**Vibrations:** 28,000  
**Power reserve:** 42 hours





R03 Chronograph with dial in the open position



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Hand-finished decoration of the R03 steel case chronograph case



Hand-finished interior angles on the movement rotor

# THE CLASP

R03 CHRONOGRAPHE MAGICAL  
WATCH DIAL





Steel folding clasp  
Swiss made  
Hand-finished decoration



**R**EVELATION is a dream come true for a couple united in private life and professionally. Anouk Danthe and Olivier Leu are both industrial designers in the watchmaking business.

On January 31st 2007, they found-

points towards the past, like a tribute to watchmaking pioneers, while the other is resolutely turned towards the future. The two mirror-like elements materialise the link between the history of classical fine watchmaking and new trends, playing

# THE FOUNDERS

## A COUPLE, A DREAM

ed Créations Horlogères de Lully SA to accommodate the two creative talents' shared intellectual property: the REVELATION brand and the patent for "a watchmaking piece with a modular display," for the purpose of bringing to life the first historical piece.

The brand logo, designed by the founders, also represents their own approach: a balanced and harmonious vision blending feminine and masculine qualities. One

with the most extravagant materials and the most astonishing designs.

Once the brand was established in the old school of Lully-sur-Morges, a village located in the heart of the vineyards overlooking Lake Léman, the adventure could at last begin.





# REVELATION

CRÉATIONS HORLOGÈRES D'EXCEPTION

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