### WATCH YOUR TIME



FINE WATCHES MAGAZINE



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— SPECIAL FEATURE —
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Thiemo Sander and Helmut Stelzenberger light up time

The year's new watches in words and images



### WHAT DO THEY SEEK?

Explorers, adventurers, scientists. Men and women who always broadened the horizons, for all humankind to share. Rolex was at their side when they reached the deepest point in the oceans, the highest summits of the Earth, the deepest jungles and both poles. But now that we know, more than ever, that our world has its limits, why do they continue to venture out there, again and again? Certainly not for kudos, accolades, or an ephemeral record. What they truly seek is to understand more intimately how complex and delicate our planet is, to document its change and how together, we can affect it for the better. So as long as they need it, we will be at their side. Because today, the real discovery is not so much about finding new lands. It's about looking with new eyes at the marvels of our planet, rekindling our sense of wonder, and acting to preserve our pale blue dot in the universe...

Doing our very best for a Perpetual Planet.

### #Perpetual



OYSTER PERPETUAL SUBMARINER DATE









Type XX

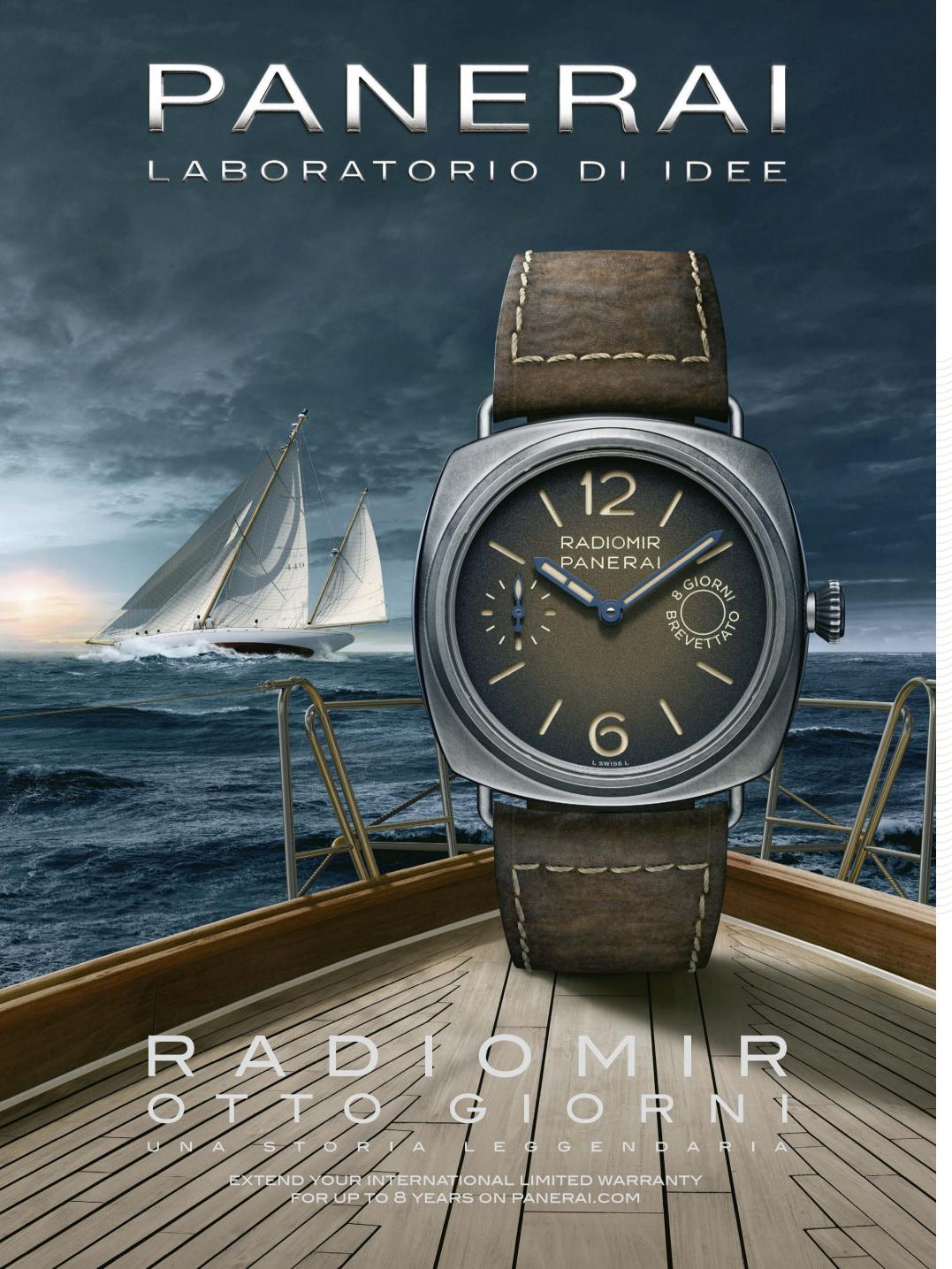
The Breguet *Type XX* has accompanied the most experienced pilots since 1954, landing on the wrist with perfect precision.

2057

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Bregue!

Depuis 1775



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JAEGER-LECOULTRE REVERSO TRIBUTE DUOFACE TOURBILLON.

"LA GRANDE MAISON" PRESENTS THE REVERSO TRIBUTE DUOFACE
TOURBILLON IN ROSE GOLD INSPIRED BY ITS FIRST TOURBILLON
WRISTWATCH — THE REVERSO TOURBILLON — INTRODUCED THIRTY YEARS
AGO. A GLORIOUS EXPRESSION OF CALIBRE 847 WHICH DEBUTED IN 2018,
IT SHINES A SPOTLIGHT ON THE MANUFACTURE'S AVOWED EXPERTISE IN
TOURBILLONS. INCORPORATING THE DUOFACE CONCEPT, ITS TWO DIALS
PRESENT TWO DIFFERENT AESTHETICS, WITH A SECOND TIME ZONE
AND A DAY-NIGHT INDICATOR ON THE REVERSE DIAL. THE ULTRA-THIN
MANUAL-WINDING JAEGER-LECOULTRE CALIBRE 847 COMPRISES
254 COMPONENTS AND MEASURES JUST 3.9MM THICK.

# THIEMO SANDER Beauty is in the eye of the beholder. Oscar Wilde (1854 – 1900)

Thiemo Sander is a Paris-based German photographer. His first encounter with photography was at the age of 14, when his father gave him a camera. He went on to study photography in Munich, getting his big break when German *Elle* published his pictures. His images of women highlight their individual sensuality and beauty, character and inner spirit. While he prefers to stay out of the spotlight himself, Thiemo Sander works extensively in fashion and jewellery, for brands such as Fred, Cartier and Boucheron. He has also photographed personalities including Monica Bellucci, Emmanuelle Beart, Lea Seydoux, Isabelle Adjani and Diane Kruger. He is the author of this magazine's cover photo and photos on pages 30, 46, 52 and 60.

PHOTOGRAPHER THIEMO SANDER REPRESENTED BY JR ASSOCIÉE — ARTISTIC DIRECTION ALI SAADI

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### WATCH YOUR TIME

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CALIBRE 5 FLYING TOURBILLON MOVEMENT, DESIGNED AND ASSEMBLED BY THE CHANEL MANUFACTURE WATCH IN HIGHLY RESISTANT CERAMIC AND DIAMONDS



### BVLGARAI

OCTO ROMA



No one saw it coming but when the Tambour did arrive, the watch world took notice. Reference LV277 was every inch a Vuitton: its brown dial echoed the trunk-maker's canvas; yellow hands recalled the beeswax-coated linen thread of its saddle stitching, and the 12 letters of the Louis Vuitton name were spelled out on the side of the unusual "bassine" case. The mechanics were of an equally fine pedigree: a high-frequency chronograph on an El Primero base measuring tenths of a second and COSC chronometer-certified. After a long line of variations, including GMT and regatta models alongside considerably more exclusive complications such as a bi-chronograph and the Spin Time with its rotating cubes, the Tambour comes home. Under the stewardship of Jean Arnault, Watch Director at Louis Vuitton, the new Tambour adopts the sophistication and elegance one would expect from a twenty-first-century icon.

"First we looked at the curved shape of the case, which gives the Tambour its special charm, and the strap integration, and working from there we thought about how we could alter the design without transforming it, with the aim of creating the first Louis Vuitton watch on an integrated bracelet," says Jean Arnault. "We wanted this to be a watch with great substance, in terms of horological content, in the Louis Vuitton style and with a distinctive identity. A watch on which we could build a collection for the next twenty years. I'd say the result is quite different

LOUIS VUITTON TAMBOUR. WHAT MAKES A TAMBOUR WATCH? A TAPERED ROUND CASE MARKED WITH THE 12 LETTERS OF "LOUIS VUITTON" AND A VOLUME THAT IS ALMOST ARCHITECTURAL IN ITS APPROACH TO DIMENSION AND PROPORTION. ALL THESE ATTRIBUTES, AND MORE, ARE MAINTAINED AND MAGNIFIED THANKS TO SOPHISTICATION IN EVERY DETAIL. DESIGN FLOWS IN EVERY LINE OF THE NEW TAMBOUR. THIS IS DESIGN IN ITS ORIGINAL SENSE, WHICH GOES BEYOND THE AESTHETIC, INTO PURPOSE AND INTENTION. TO BEGIN, A MODERN MOR

from the original Tambour and at the same time there can be no doubting its lineage." The new Tambour has a more refined shape and is distinguished by haute horlogerie finishing, while the laidback aesthetic already tells you this is a watch you won't want to be without.

### A passion for detail

Presented as five references — gold, steel, gold and steel — the new Tambour puts the emphasis on comfort and wearability. Just 8.3mm thick, it hugs the wrist thanks to the slender, lightly curved bracelet links, the circular arc of the caseback and the triple-blade folding clasp. "Aside from jewelry watches and the very decorative 'métiers d'art' models, it makes no sense, in this day and age, to think in terms of watches for *Monsieur* and watches for *Madame*," continues Arnault. "This 40mm Tambour is typical of an approach whereby we consider the watch more as an 'object', rather than in terms of masculine or feminine attributes. Characteristics such as elegance, fluidity or the tactile quality of a particular finish cannot be described as belonging to a given gender."

The difficulty when launching a three-hand or time-only watch is how to stand out in an already overcrowded segment. Meanwhile, the popularity of sport-luxe, a throwback to the watches that upturned convention in the 1970s, has led to a plethora of models with integrated brace-

PHOLOGY, WITH A FULLY UNISEX 40MM DIAMETER AND AN 8.3MM THICK CASE THAT FOLLOWS THE LINE OF ANY WEARER'S ARM. THE INTEGRATED BRACELET ON THE NEW TAMBOUR IS A BLEND OF ROBUSTNESS AND FLUIDITY, ITS SLIM, CURVED LINKS PROVIDING A CLOSE AND COMFORTABLE FIT ON THE WRIST TO RIVAL THE SOFTEST LEATHER STRAP. TWO STEEL VERSIONS DISTINGUISH THE LAUNCH OF THE NEW TAMBOUR, REINFORCING THE DESIGNATION OF THIS COLLECTION FOR DAILY WEAR. A TONE-ON-TONE MODEL WITH SILVER-GREY

lets — some of which have languished while others have gone on to greatness. One look at the new Tambour leaves no doubt as to where it stands. A lesson in harmony, it offers a degree of subtlety in its details and finishing that make this functional, legible, well-structured watch remarkably elegant, with its clean, architectural lines. Despite being barely more than a millimetre thick, the dial shows surprising depth. The hour track is microblasted, with the outer circle reserved for minutes and the inner circle for applied indices and hour numerals. The centre is vertically brushed while the small seconds subdial features snailing. The care and attention lavished on the outside of this Tambour is replicated on the inside. When developing the exclusive LFT023 automatic calibre, a mere 4.2mm high thanks to a micro-rotor, La Fabrique du Temps Louis Vuitton consulted with Le Cercle des Horlogers movement design studio. The result is distinctly contemporary in terms of appearance, with a circular-grained plate, microblasted and chamfered bridges, and transparent jewels. Beating at 28,800 vibrations/hour (4 Hz), it provides 50 hours of power reserve. Louis Vuitton is the first brand to submit a watch for certification by Geneva's Observatoire Chronométrique, under the aegis of the TimeLab Foundation. No doubt about it, this new-generation Tambour has its place on the wrist of anyone who appreciates fine watchmaking. The kind that leaves nothing to chance. Eric Dumatin

DIAL OR ONE WITH A CONTRASTING DEEP BLUE DIAL ARE THE OPTIONS FOR THE INTRODUCTION OF THE MAISON'S REBORN EMBLEMATIC COLLECTION, AN ENRICHED TAMBOUR WITH TWO ADDITIONAL FIRSTS FOR LOUIS VUITTON — AN INTEGRATED BRACELET AND AN EXCLUSIVE NEW AND BEAUTIFULLY CRAFTED AUTOMATIC MOVEMENT DESIGNED BY LA FABRIQUE DU TEMPS LOUIS VUITTON.

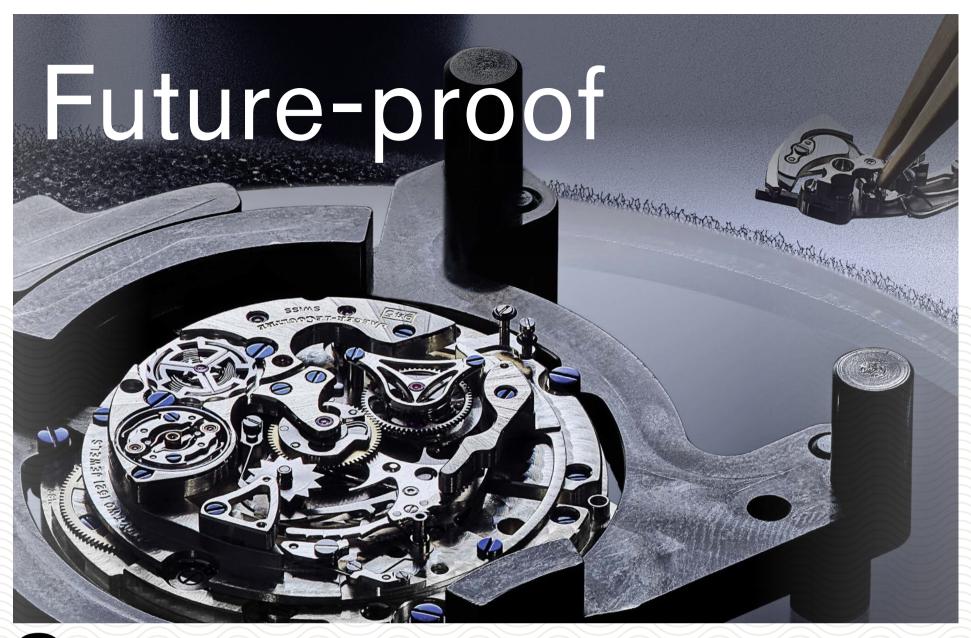


The LONGINES SPIRIT FLYBACK is a bold illustration of the pioneering spirit that has always driven the brand. Its flyback mechanism, invented by Longines in the 1920s, resets the chronograph's seconds hand to zero and immediately restarts the timing with a single push. This stunningly timeless chronograph is an invitation to the explorer inside you. Ready for adventure?



LONGINES SPIRIT FLYBACK

# RICHARD MILLE RM UP-01 FERRARI Baseplate, bridges and case in grade 5 titanium RICHARD MILLE / 🔧 A Racing Machine On The Wrist



omewhere, in some enchanted place, lives the watch of your dreams. The one that consumes your every waking moment. Whose arrival you have meticulously planned. But can you be sure the longed-for timepiece is in stock at your local AD? That your name won't be added to the bottom of a waiting list that's already months, possibly even years, long? These are very real questions for anyone coveting certain mechanical models. The watch industry not only produces intensely desirable products; it knows how to maintain that desire regardless of the market context. This has translated into a string of record years for the profession, on the basis of mechanisms built according to principles that are more than five hundred years old. In the age of the smartwatch and wall-to-wall digital, this is nothing short of impressive!

In a competitive environment, a business must know how to turn weaknesses into strengths. This is exactly what these watch brands, many of which were established well over a century ago, have done. Caught napping by the quartz technology that flooded the market in the

1980s, today they enjoy rosy health, boosted by sales across all four corners of the globe. They owe their eternal youth to one small object: the mechanical watch. Anachronistic, outmoded, antiquated for some, for collectors and enthusiasts the mechanical timepiece is a distillation of specialist knowledge, science, art and technique.

If watchmakers were to demonstrate that not everything that could be invented had been invented, their only option was innovation — and if current production is anything to go by, they have succeeded, brilliantly. Since the revival of the mechanical watch in the early 2000s, brands have shown themselves capable of remarkable creativity in design, movement construction and the application of high-tech materials, always with the objective of ultimate precision, shock-resistance and reliability, using methods that promote sustainability, social responsibility and environmental protection.

As a result, today's mechanical watches are more accurate, more robust, more reliable, more... Taken to an extreme, this gives

watches that weigh just a couple of grams, are no thicker than a credit card and gain or lose a maximum of two seconds a day. In much the same way that Formula 1 is a laboratory for the cars on tomorrow's roads, producing innovations in mechanical and materials sciences that will benefit an entire industry, watchmaking is building the future.

Christophe Roulet

JAEGER-LECOULTRE CALIBRE 945.
FITTED IN THE MASTER HYBRIS ARTISTICA
CALIBRE 945, THIS MOVEMENT UNITES A SKY
CHART WITH A CELESTIAL VAULT, A ZODIACAL
CALENDAR AND A MINUTE REPEATER, AND IS
FURTHER ELEVATED BY JAEGER-LECOULTRE'S
COSMOTOURBILLON — A CELESTIAL FLYING
TOURBILLON.

### HELMUT STELZENBERGER

Helmut Stelzenberger is a German photographer whose work is in demand worldwide, from New York to Tokyo or Milan, although his heart and his home are in Paris. His pictures, which have been described as "metaphorical exposure", demonstrate his ability to use light to remarkable effect, immortalising change so that the past will be remembered for the future. He interprets and conveys things we could never see without his gaze and vision. Helmut Stelzenberger's work has featured in numerous international magazines and he has shot campaigns for global brands including Chanel, Cartier, Longines, Louis Vuitton, Ralph Lauren and Dior. (See pages 44 to 46)







"Everything we did to revitalise the brand over the past five years has paid off. We have taken back our number-two position." Speaking during Watches and Wonders Geneva, Cyrille Vigneron is in no doubt: the importance given to timepieces has put the brand's watches on an equal footing with its jewellery. Not from a sales perspective, granted, but certainly in terms of awareness. As the Cartier CEO reminds us, the brand, which was established in Paris in 1847, enjoyed its first success as a jeweller, gaining prominence under the stewardship of Louis, Pierre and Jacques, the three grandsons of founder Louis-François Cartier. While watches became part of its repertoire early on, it concentrated on design and turned to Swiss manufacturers for the movements. It wasn't until the 1970s that Cartier became a watchmaker in the true sense, with its own production facilities.

This was a smart move, given its position in the horological landscape today. Morgan Stanley estimates that the brand's watchmaking division turned over CHF 2.7 billion in 2022, which is around 30% of its total sales. Cartier is now the second-largest watch company in the world with the creativity to

CARTIER SANTOS-DUMONT SKELETON WATCH. THE SANTOS-DUMONT SKELETON WATCH IS A TRIBUTE TO ALBERTO SANTOS-DUMONT, WHO ROSE (QUITE LITERALLY) TO FAME AS THE INVENTOR OF 22 FLYING MACHINES, RISKING LIFE AND LIMB WITH EACH OF HIS EXPERIMENTAL FLIGHTS. IT IS FITTED WITH THE AUTOMATIC 9629 MC CALIBRE, A MICRO-ROTOR MOVEMENT THAT WAS ALMOST TWO YEARS IN DEVELOPMENT AND COMPRISES 212 PARTS. THIS INVENTIVE SKELETON MOVEMENT INCORPORATES NUMEROUS DETAILS THAT REFERENCE THE PIONEERING AVIATOR, INCLUDING

prove it. While some exhibitors came to Watches and Wonders Geneva with a single new product, Cartier unveiled more than sixty: an astonishing number. As Cyrille Vigneron explained to *Hodinkee*, the brand is sticking to the same winning strategy, which covers three main territories. First, the historic Cartier form watches that are gently rejigged in line with modern tastes without betraying their original spirt. The likes of the Panthère, Santos, Ballon Bleu or Tank Française, relaunched early in the year, or the Baignoire that caught everyone's eye in Geneva. All these watches become the basis for a small collection of new interpretations.

### Style and elegance

Then Cartier Privé: "Each year, the Cartier Privé collection celebrates the Maison's iconic models through limited-edition numbered watches, rare creations that bridge the gap between Cartier's watchmaking heritage and today's aesthetic vision." The Crash, the Tank Cintrée, the Tonneau, the Tank Asymétrique, the Cloche and the Tank Chinoise have all had the honour of joining this "private club". Seventh in line, in 2023, is the Tank Normale, including in a highly original

THE MINIATURISED OSCILLATING WEIGHT IN THE SHAPE OF THE DEMOISELLE: A TRAIL-BLAZING PLANE WHICH SANTOS-DUMONT DESIGNED IN 1907. THE SYMBOL IS ALL THE MORE POWERFUL AS IT APPEARS TO SOAR ABOVE A GLOBE. THE SANTOS-DUMONT SKELETON WATCH BUILDS ON THE ELEGANT LEGACY OF THE VERY FIRST MODEL FROM 1904. PARTICULARLY REFINED, THE VERSION IN YELLOW GOLD AND NAVY LACQUER IS A LIMITED EDITION OF 150 PIECES. THE BEZEL AND CASE, AS WELL AS THE SKELE-TON BRIDGES OF THE MOVEMENT, ARE DELICATELY HAND-LACQUERED. skeletonised version. Conceptualised in 1917 and introduced to the market two years later, "the Tank is one of the most remarkable creations of the Maison and indeed in the history of watchmaking. Its meticulous design and pure lines have made it an icon that has transcended time." For collectors, Cartier also reissues certain particularly sought-after models in versions that are as close as possible to the original design, as with the Pasha Complete Calendar in 2021 or last year's Pebble.

This leaves the Cartier Libre collection where, as Cyrille Vigneron succinctly puts it, "we can do whatever we want." Part of this year's offering is the Clash [Un] Limited jewellery watch, an architectural, articulated structure composed of bevels and facets, spikes, studs and beads that roll against the wrist. Releases such as these, for women, by no means undermine the dialogue Cartier is engaging with men, who represent between 30 and 40 percent of its clientele. "Paradoxically," says Cyrille Vigneron, "the more we focus on style and elegance rather than mechanisms, the more men come to us." At Cartier, some things never change...

CARTIER TANK NORMALE SKELETON WATCH. IMAGINED IN 1917, THE TANK IS ONE OF THE MOST ENDURING FORMS IN THE HISTORY OF WATCHMAKING. CARTIER HAS NOW ADDED A SKELETON MOVEMENT TO THIS ICON ALONG WITH A 24-HOUR COMPLICATION, REPRESENTED BY SUN AND CRESCENT MOON SHAPES CUT INTO THE CALIBRE. DAYTIME HOURS ARE SHOWN ON THE UPPER PART OF THE DIAL AND NIGHT-TIME HOURS ON THE LOWER PART. THE SKELETONISED BRIDGES GO FROM A LIGHT TO DARK SHADE TO SYMBOLISE THE PASSAGE FROM DAY TO NIGHT.



### THE WATCHMAKER OF WATCHMAKERS



### **REVERSO**



"Reliability, performance and innovation: these are the characteristics of the TAG Heuer Carrera which this year celebrates sixty years in constant acceleration, having clocked up more than 500 references." These words, from TAG Heuer CEO Frédéric Arnault's keynote at the Watches and Wonders Geneva fair, sum up a watch that, right from its launch in 1963, became the ultimate "racing driver's chrono". With so many variations over its six decades, the Carrera is of course more than this, but its origins on the racing circuit make this a watch built for speed and for action. "To what does the Carrera owe its success?" asked Arnault. "A strong and distinctive design, constant new developments and an osmosis with motor sports." The Chase for Carrera, an action-packed movie (with moments of pure comedy) that celebrates this icon's six decades, captures its fast and furious personality, with none other than Ryan Gosling at the wheel of a Porsche 911 and David Leitch (John Wick, Deadpool, Bullet Train) in front of and behind the camera.

As Frédéric Arnault reminded the audience, Carrera owes its long-running popularity on and off the motor-racing circuit to the mechanics under its hood. Here is a watch that in 1969 housed the first ever automatic chronograph calibre: the now legendary Calibre 11. Since then, TAG Heuer's Research and Development division has

TAG HEUER CARRERA CHRONOGRAPH TOURBILLON "GLASSBOX". MORE THAN TWO CENTURIES AFTER THE INVENTION OF THE TOURBILLON — WHICH ENCLOSES THE ESCAPEMENT IN A CONSTANTLY ROTATING CAGE SO AS TO COUNTER THE INFLUENCE OF GRAVITY ON A MECHANICAL MOVEMENT'S ACCURACY — FEW WATCH BRANDS MASTER THIS COMPLEX MECHANISM. TAG HEUER IS ONE. ITS NEW CARRERA IS EQUIPPED WITH THE TH20-09 CALIBRE, AN IN-HOUSE TOURBILLON MOVEMENT WITH BIDIRECTIONAL WINDING FOR IMPROVED EFFICIENCY

continued to push the boundaries with movements that record elapsed times in increasingly tiny fractions: think of the Carrera Mikrogirder and its mechanical precision of... 1/2000th of a second. Here, too, the brand has called on industry A-listers. Its Movements Director since 2020 is Carole Forestier-Kasapi, a movement designer at the top of her game who in 2021 was awarded the Prix Gaïa in the Craftsmanship-Creation category. The first watches developed under her stewardship were released last year. Speaking in Geneva, she explained how "first of all we worked on movement reliability to then offer a five-year extended warranty. We also introduced the solar-powered TH50-00 Solargraph and the COSC-certified TH30-00 with 70 hours of power reserve that now equips the Aquaracer Professional 1000 Superdiver. This marked an important step for TAG Heuer in terms of performance."

### No limits

This year's releases in the brand's two flagship ranges are similarly impressive, starting with an Aquaracer Professional 200 dive watch in solid gold. Particular care has gone into the finishing on the TH31-00 movement, a new in-house calibre that is COSC-certified and features a beefed-up 80-hour power reserve. The Carrera is, of course, part of this wave of innovation. Following on from the classic 60th anni-

AND ACCURACY THAT PROVIDES 65 HOURS OF POWER RESERVE. THIS CHRONOMETER-CERTIFIED (COSC) MOVEMENT ALSO HAS A CHRONOGRAPH FUNCTION AND IS BACKED BY A FIVE-YEAR WARRANTY. EVERY ELEMENT HAS BEEN STUDIED TO REFLECT THE MECHANICAL BEAUTY OF THE TOURBILLON WHICH, THANKS TO THE CURVED SAPPHIRE CRYSTAL AND FLUID FORM, CAN BE OBSERVED FROM A WIDER RANGE OF ANGLES. ON THE DIAL, THE FLANGE AND INDICES ARE SUBTLY CURVED TO MIRROR THE CRYSTAL'S EDGE, ADDING TO THE OVERALL REFINEMENT.

versary edition with panda dial, introduced early in the year, TAG Heuer came to Watches and Wonders with a raft of new models. They include two Carrera Chronographs featuring that collector's favourite: a domed "Glassbox" crystal. The 39mm case is ergonomically designed while the overall aesthetic emphasises curves and flow. Legibility is perfect. Proposed with a blue dial or a reverse panda dial, both these releases are driven by the TH20-00 calibre, which is an updated version of the Heuer 02.

Naturally, TAG Heuer's Movements Director had more tricks up her sleeve. The new TH20-09 calibre, also COSC-certified, equips the Carrera Chronograph Tourbillon. As with the TH20-00, Carole Forestier-Kasapi and TAG Heuer's movements team developed the TH20-09 to offer bidirectional winding for improved power efficiency and precision. Finishing is of a higher grade and there is a five-year warranty. But the Carrera wouldn't be the Carrera without a touch of glamour. This comes courtesy of the Carrera Plasma which benefits from the pioneering technology of lab-grown diamonds on its case, crown, dial and indexes. For the latest versions, these diamonds are also splashed over the bezel and bracelet in aluminium, or turn a chic pink colour on a 39mm execution. Nothing can stop the Carrera.

TAG HEUER CARRERA DATE. IN CELEBRATION OF THE CARRERA'S 60TH ANNIVERSARY, TAG HEUER HAS RELEASED A NEW VERSION OF THE CARRERA DATE 36MM THAT SPOTLIGHTS A SPORTY AND ERGONOMIC PROFILE WHILE RETAINING THE COLLECTION'S MOTOR RACING-INSPIRED CODES. THIS NEW SERIES OFFERS COLOURED DIALS, A TAPERED BRACELET DESIGN AND AN UPGRADED MOVEMENT. THE 36MM CARRERA DATE WATCHES CARRY SPECIAL SIGNIFICANCE AS THE FIRST HEUER CARRERA, FROM 1963, ALSO MEASURED 36MM IN DIAMETER.



## T H E A R T O F F U S I O N

SQUARE BANG UNICO SAPPHIRE

Sapphire case. In-house UNICO chronograph movement.
Limited to 250 pieces.





Montblanc has clearly found its way. The brand, which since 2007 has had the backing of Minerva, a highly respected manufacturer whose watches equipped adventurers and explorers during the twentieth century, is exploring these new territories with unconcealed pleasure. Established in Germany and renowned for its writing instruments, with no long legacy of watchmaking, Montblanc seemed an unlikely candidate to join the ranks of *haute horlogerie* brands. Really? Having initially imagined its timepieces to reflect the design of its luxury pens, the brand then changed direction and, building on Minerva's manufacturing expertise, began to propose watches with much greater horological substance, starting with the Rieussec chronograph that was unveiled in 2008.

Montblanc has continued to demonstrate the remarkable expertise amassed by a Manufacture that built its reputation on precision timing, through the release of models such as the ExoTourbillon, a patented complication, or the Metamorphosis I and II — ultra-complicated watches with multiple dials that appear and disappear to display different functions. But this was never its vocation, as Montblanc's chief executive Nicolas Baretzki explains: "Established in 1858, Minerva is the backbone of our activity and we could see that there was no sense in developing complications that had no connection to its traditions. Of course we can do this from time to time, giving credibility to our watchmaking expertise, but more than anything else we want our collections to be entirely coherent with Minerva's rich heritage."

MONTBLANC 1858 THE UNVEILED TIMEKEEPER MINERVA 100. MONTBLANC BASED ITS THE UNVEILED TIMEKEEPER MINERVA ON A HISTORIC CALIBRE FROM 1923. ALL THE ATTRIBUTES OF A MINERVA MOVEMENT ARE IN EVIDENCE ON WHAT IS A HIGHLY ADVANCED CHRONOGRAPH CALIBRE — AS DEMONSTRATED BY THE ABSENCE OF CHRONOGRAPH PUSHERS. THANKS TO AN INNOVATIVE MECHANICAL FUNCTION, THE MEASUREMENT OF SHORT ELAPSED TIMES IS ACTIVATED VIA THE FLUTED BEZEL: ONE CLICK STARTS THE CHRONOGRAPH, A SECOND CLICK

### Making connections

Alongside the Bohème line of women's watches and the classic aesthetic of the Star Legacy, Montblanc has developed the 1858 range to capture the spirit of adventure and mechanical pedigree of Minerva timepieces, through models that hark back to the tool watches of decades past. With this in mind, last year saw the launch of the first Montblanc dive watch. The 1858 Iced Sea Automatic Date takes inspiration from the Montblanc logo. Imagined in 1913, it depicts the Mont Blanc mountain seen from above, surrounded by six glacial valleys. The idea for the "iced" dial came from observations of the Mer de Glace (Sea of Ice), the largest of the Mont Blanc glaciers. Crafted using a rare technique known as gratté boisé, it reproduces the glacier's fractured appearance while recreating its mysterious depths and the play of light across its surface, thus forging a link between brand and product. This is, of course, a certified dive watch that conforms to ISO 6425 standard, is water-resistant to 300 metres and has passed Montblanc's gruelling 500 Hours Test for resistance to shocks, magnetic fields and extreme temperatures.

According to Nicolas Baretzki, "1858 is destined to become a core collection and the Iced Sea watches will be at its heart. They epitomise our values, as customers have been quick to recognise. This has been an entirely successful launch. In fact this year we are releasing two new versions,

STOPS IT AND A THIRD RESETS TO ZERO. THIS HIDDEN FEATURE ALSO EMPHASISES THE TRADITIONAL AESTHETIC OF THE WATCH, WHOSE DIAL CARRIES
TELEMETER AND TACHYMETER SCALES. 2023 MARKS THE 165TH ANNIVERSARY
OF THE MINERVA MANUFACTURE AND THE CENTENARY OF ITS FIRST WRISTWATCH
CHRONOGRAPH MOVEMENT, CALIBRE 13.20. REWORKED, IT BECOMES THE 13.21
MOVEMENT INSIDE THIS WATCH. THIS VERSION IN STAINLESS STEEL WITH A WHITE
GOLD BEZEL AND BLUE DIAL IS LIMITED TO 100 PIECES.

including one whose dark grey dial is the colour of glacial ice. It's my personal favourite." Montblanc is also developing its 0 Oxygen technology, for explorers who need their equipment to perform in the most hostile conditions. Removing oxygen from the case eliminates fogging caused by the severe temperature changes that can occur at altitude and also prevents oxidization. An Automatic, a Chronograph and a Geosphere, with or without a chronograph function, all benefit from this technology, making them fit for scaling the planet's 14 "eight-thousanders" — mountains that exceed 8,000 metres in height above sea level. Interchangeable and adjustable V-shaped bracelets add to the appeal of these Iced Sea and 0 Oxygen The 8000 lines.

Mountaineering is one thing. Montblanc also scales mechanical heights with a new limited edition, cased in steel, of its 1858 The Unveiled Secret Minerva Monopusher Chronograph. The MB M16.26 calibre is reversed to reveal all the power of this chronograph movement. Joining this exceptional timepiece is the equally remarkable 1858 The Unveiled Timekeeper Minerva. Rather than the usual pushers, its chronograph is started, stopped and reset through the unidirectional rotating bezel. A first in Montblanc's watchmaking history and the subject of three patent applications in Switzerland, it confirms the brand's determination to conquer horological summits.

MONTBLANC 1858 GEOSPHERE 0 OXYGEN THE 8000. A CELEBRATION OF THE WORLD'S HIGHEST PEAKS, MONTBLANC'S 1858 0 OXYGEN THE 8000 CAPSULE COLLECTION INCLUDES THIS GEOSPHERE WITH GMT, DATE AND WORLD TIME SHOWN ON ROTATING HEMISPHERES. THE 42MM CASE IN STEEL HAS BEEN EMPTIED OF OXYGEN TO ELIMINATE FOGGING ON THE CRYSTAL AT HIGH ALTITUDE AS WELL AS PREVENT OXIDIZATION, AND IS LASER-ENGRAVED ON THE BACK WITH AN IMAGE OF K2, THE SECOND-TALLEST SUMMIT ON EARTH. A BIDIRECTIONAL BEZEL SURROUNDS THE SFUMATO DIAL.





To call Chopard a modern-day alchemist isn't as farfetched as it may sound. In much the same way that the alchemists of old looked for techniques to transmute base metals into precious metals, turning lead into gold, the Geneva-based Manufacture invests in producing "responsible" metals that are respectful of people and the planet. It's a long-term commitment that began a decade ago when the brand embarked on its Journey to Sustainable Luxury. Since July 2018, its foundry has sourced all its gold from transparent and traceable sources. Now, after ethical gold comes steel! Speaking at the Watches and Wonders fair in Geneva earlier this year, Karl-Friedrich Scheufele, Co-President of this family-owned firm, explained that as of end 2023, Chopard would use only steel containing 80% recycled metal for its watch collections. So as to further underline this commitment, Chopard has become the first luxury brand to join the Climate Group's SteelZero initiative to speed up the steel industry's transition to net zero carbon emissions.

What does this mean in practical terms? Chopard's Lucent Steel A223 is manufactured in Austria by Voestalpine Böhler Edelstahl, one of the largest steel producers in the world. First seen in 2019 with the launch of the Alpine Eagle collection and containing 70% recycled metal, Lucent Steel is, to quote the brand, "as rich,

CHOPARD MILLE MIGLIA CLASSIC CHRONOGRAPH. AT A SMALLER 40.5MM, THIS MILLE MIGLIA WON'T GET IN THE WAY OF YOUR DRIVING AND WILL LOOK THE PART WHETHER IT'S WORN WITH A RACING SUIT OR AN EVENING SUIT. THE SAPPHIRE CASEBACK REVEALS A COSC-CERTIFIED CHRONOGRAPH MOVEMENT. AUTOMATIC WINDING ACCUMULATES 54 HOURS OF POWER RESERVE.

precious and complex as gold, with three unique characteristics." Thanks to its hypoallergenic composition, Lucent Steel A223 is endowed with properties similar to those of surgical steel. With a hardness of 223 Vickers, this proprietary alloy is 50% more resistant to abrasion than conventional steel. Thirdly, its crystal microstructure, which is more homogenous than that of conventional steel, gives it a reflective quality and a brilliance comparable to white gold.

### Sustainable luxury

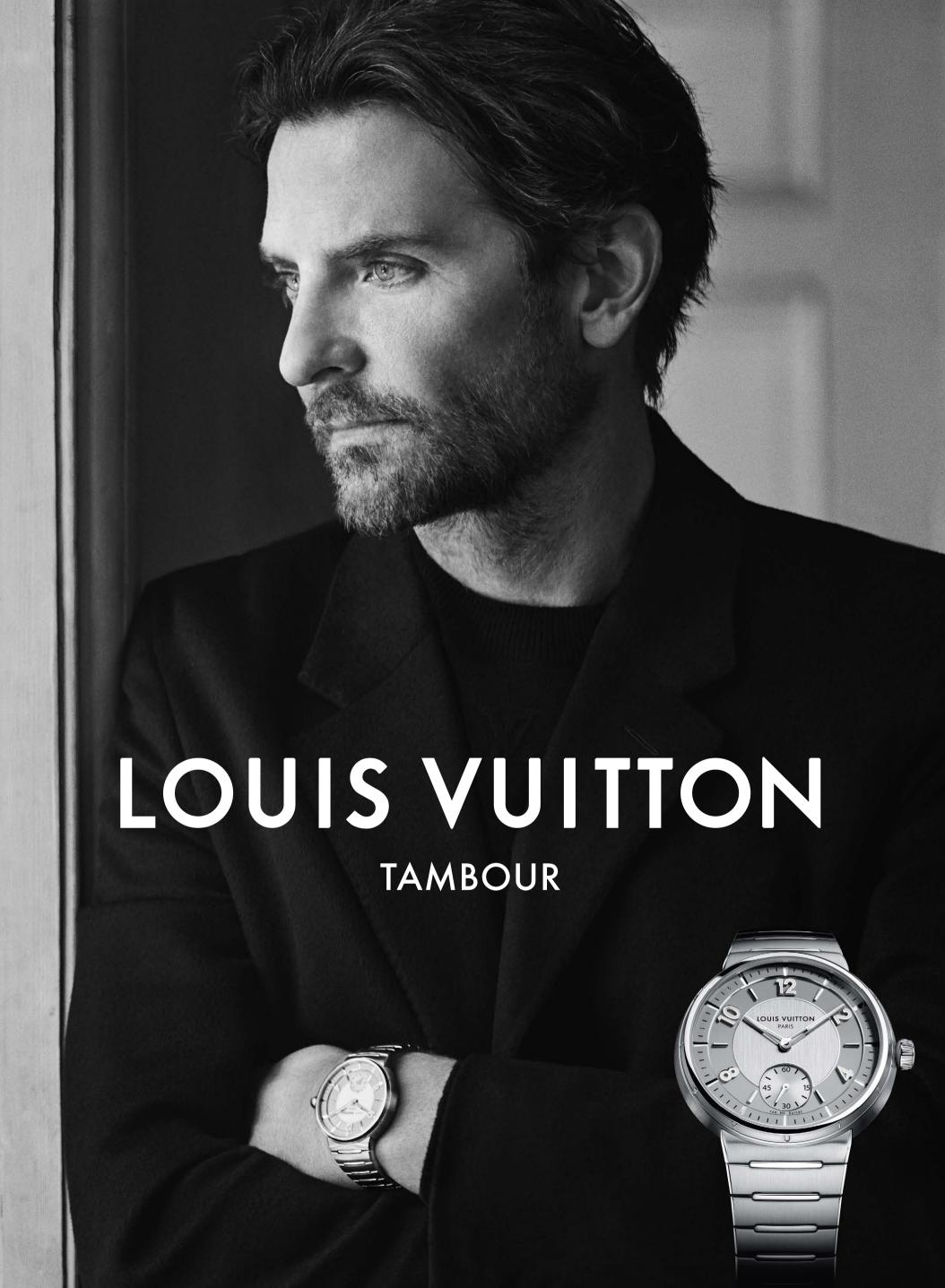
Never one to rest on its laurels, Chopard has announced its intention to extend its use of recycled steel. "This year we are introducing Lucent Steel to all our collections and increasing its recycled content to 80%. Our objective is to reach a minimum of 90% by end 2025," said Karl-Friedrich Scheufele. "We've gone from dream to reality, but only after four years of research and development. Now our efforts are rewarded as we extend Lucent Steel to all our collections by end 2023. In volume terms, this represents 25 to 30 tonnes a year." Thanks to this initiative, Chopard will significantly reduce its carbon emissions. According to figures published by the International Stainless Steel Forum, shifting from standard 50% recycled steel content to 80% will cut emissions linked to production by 30%. At 90% recycled steel this figure increases to 40%.

CHOPARD ALPINE EAGLE XPS. ALPINE EAGLE IS CHOPARD'S SPORTS WATCH LINE, INSPIRED BY THE 1980S ST MORITZ WATCH. ITS CLEAN DESIGN AND SOPHISTICATED MECHANISM ARE EVIDENT IN THIS EXTRA-THIN EXECUTION. BOTH THE CASE AND THE INTEGRATED BRACELET ARE IN LUCENT STEEL, AN EXCLUSIVE ALLOY THAT WAS INTRODUCED WITH THE ALPINE EAGLE COLLECTION IN 2019. REMARKABLE FOR ITS RESISTANCE AND SHINE, THIS STEEL NOW HAS AN INCREASED RECYCLED METAL CONTENT OF 80% AND WILL BE ROLLED OUT TO ALL CHOPARD'S WATCH COLLECTIONS. BEATING INSIDE THE 41MM CASE IS THE L.U.C 98.40-L MOVEMENT, AN

The creation of a local, circular manufacturing loop powered by renewable electricity will also contribute to this reduction in emissions.

From theory to practice: this new Lucent Steel appears in Chopard's four flagship ranges, as the Alpine Eagle XPS, the Happy Sport 25 mm, the L.U.C 1860 and the Mille Miglia Classic Chronograph. Drawing inspiration from the first timepiece in this collection, from 1997, the L.U.C 1860 (36.5 mm diameter) features a salmon-coloured, hand-guilloché dial in solid gold and houses the L.U.C 96.40-L extra-thin (3.3 mm high) calibre which has COSC certification. This same movement, which is automatically wound by micro-rotor and delivers 65 hours of power reserve thanks to twin barrels, also drives the Alpine Eagle XPS with an integrated steel bracelet and a textured "Monte Rosa Pink" dial. The Happy Sport 25 mm introduces a new size option that can be admired on the wrist of Julia Roberts, the face of all Chopard's women's collections. Completing the line-up in Lucent Steel is the 40.5mm Mille Miglia. The effortlessly legible dial comes in different shades, inspired by the colours of classic racing cars, under a retro-inspired "glassbox" crystal. Energy and elegance, engineering and performance, speed and style: the famed Italian classic car race shares many attributes with Chopard's unique Eric Dumatin

EXTRA-THIN CALIBRE AT 3.3MM HIGH. COSC CHRONOMETER-CERTIFIED, IT DELIVERS 65 HOURS OF POWER RESERVE THANKS TO CHOPARD'S TWIN TECHNOLOGY OF TWO STACKED BARRELS. THE DIAL, ON A BRASS PLATE, SHOWS SMALL SECONDS AT 6 O'CLOCK. ITS TEXTURE IS INSPIRED BY AN EAGLE'S IRIS WHILE THE MONT ROSE SALMON PINK COLOUR SUGGESTS THE ROSY GLOW THAT GIVES ITS NAME TO MONTE ROSA, THE SECOND-HIGHEST MASSIF IN THE ALP'S WHOSE PEAK, THE DUFOURSPITZE, IS SWITZERLAND'S TALLEST. THE ALPINE EAGLE XPS HAS PASSED THE FULL BATTERY OF TESTS GRANTING IT THE POINÇON DE GENÊVE HALLMARK.











MASTER OF MATERIALS



CAPTAIN COOK HIGH-TECH CERAMIC SKELETON



# The art of thin

-o--- Paolo De Vecchi

We are charmed by simple elegance.

Ovid (43 BC — 17 AD)

The subtle difference between beauty and elegance is often measured in millimetres.

Elegance is an elusive notion which, for the horologist, can come down to a question of millimetres. All watches are of course intended to be objects of great beauty; a quality which can derive from the originality or extravagance of their design, the complexity of their mechanisms or the innovative nature of the materials from which they are made. But where elegance is concerned, beauty is too broad a concept. To define elegance, we must consider other factors such as harmony, balance, purity and simplicity of line; a striving for perfection that must, in fine, appear entirely natural, effortless and require no further explanation than the pleasure it brings. Elegance is something we instinctively recognise, in a person who carries herself with poise and grace, for example, as opposed to a heavy-footed stomp.

When pertaining to objects, rather than appearances, the items we perceive as elegant originate in a classical aesthetic. An elegant suit is, undoubtedly, a classic suit (although a classic suit is not necessarily an elegant one). In the same way a tuxedo is more than simply a nice piece of tailoring.



CHOPARD L.U.C XPS 1860 OFFICER. THE L.U.C XPS 1860 OFFICER HARBOURS A WEALTH OF SECRETS AND SYMBOLS. ON ONE SIDE, A HAND-GUILLOCHÉ HONEYCOMB PATTERN DIAL IN 18K GOLD. ON THE OTHER, AN EQUALLY GUILLOCHÉ OFFICER-TYPE COVER THAT OPENS TO REVEAL THE ULTRA-THIN (3.3MM HIGH) L.U.C 96.01-L MOVEMENT. THIS WAS THE FIRST MOVEMENT FROM CHOPARD MANUFACTURE WHEN UNVEILED IN 1997, AND FEATURES CHOPARD'S TWIN TECHNOLOGY AND A MICRO-ROTOR IN 22K GOLD. FASHIONED IN 18K ETHICAL YELLOW GOLD, IN A CASE MEASURING 40MM IN DIAMETER AND 7.7MM HIGH, WITH A FOREST GREEN DIAL, THE L.U.C XPS 1860 OFFICER EPITOMISES THE ELEGANCE AND CRAFTSMANSHIP OF FINE WATCHMAKING. CHRONOMETER-CERTIFIED AND HALLMARKED POINÇON DE GENÈVE, IT WILL ADORN A CONTEMPORARY GENTLEMAN'S WRIST WITH A BLEND OF DISTINCTION AND DISCRETION.

### Beauty or elegance

This fine positioning on the scale of beauty applies to the entire palette of everyday objects — and not necessarily luxury items — such as cars, clothes and furniture. Your correspondent is Italian and has no shortage of home-grown examples with which to support this theory: Pininfarina, Giorgio Armani and Alessi are just some. He also recalls a conversation, some years ago, about watches and time with  $\rightarrow$ 

the great architect Ettore Sottsass, who confessed his preference for watches with nothing but hour and minute hands, possibly also indexes, on the dial. Sottsass even designed such an instrument, making his the "less is more" principle espoused by another famous architect, German-born Ludwig Mies van der Rohe, who pioneered the International Style with its elegantly simple, rectilinear forms. In watchmaking, then, this subtle difference between beauty and elegance is often distinguished by thickness... or lack thereof.

The watch's case is essentially a question of design. As the range of available materials has expanded, particularly in the last decades with materials borrowed from other industries alongside proprietary alloys, the variety of shapes and forms has become almost limitless. Mechanisms, with their hundreds of components, have shrunk in size, although miniaturisation must never compromise the movement's strength, rigidity or, more importantly, functioning. Makers were confronted with both these factors when, in the early 1900s, watches migrated to their new home on the wrist. As objects on display, as opposed to concealed in the depths of a waistcoat or jacket pocket, they had to be attractive but also slim enough to fit under a cuff (no-one wants an "onion" bulging under their sleeve!).

### Piaget leads the way

Thinness thus became a non-negotiable trait of the wristwatch from its earliest days, and manufacturers were quick to distinguish themselves in this pursuit of a svelte silhouette, starting with Patek Philippe and its Calatrava, and not forgetting Cartier's Santos or Tank. Circa 1950, watchmakers began to push boundaries further, their efforts duly documented. Patek was one. It developed a series of remarkably thin manually wound movements although, as Martin Huber and Alan Banbery report in their book on the history of the brand, these rarely descended below three millimetres high.

The construction of very thin movements entered a new and decisive phase in the 1950s and 1960s, courtesy of Piaget. The brand embarked on the development of watches that would, justifiably, leave their mark on the history of "ultra-thin" — a term coined for its advertisements. In 1957 it unveiled the manual-winding 9P mechanical movement which measured barely two millimetres thick. This was followed, three years later, by the automatic 12P movement with an off-centre oscillating weight and a thickness of 2.3 millimetres. These smaller dimensions, both height and diameter, inspired Piaget to create stunning jewellery watches for women. Worn to great effect  $\downarrow$ 





THE AUTOMATIC ROLEX 7140 MOVEMENT.

MENTS WERE CONCENTRATED INTO THE ALTIPLANO LINE.

NOW IT'S THE TURN OF THE PIAGET. POLO RANGE OF

SPORT-LUXE WATCHES. CALIBRE 1255P IN THE PERPETUAL

CALENDAR ULTRA-THIN MEASURES A MERE 4MM HIGH

I - ROLEX PERPETUAL 1908. ROLEX DEBUTS ITS PERPET JAL COLLECTION WITH THE PERPETUAL 1908, NAMED HAGE, BREGUET GIVES A NEW FACE TO THE CLASSIQUE FOR THE YEAR THE ROLEX TRADEMARK WAS REGIS-7137 IN WHITE GOLD. A SAPPHIRE CRYSTAL REVEALS TERED IN SWITZERI AND FLEGANTLY UNDERSTATED THE HAND-DECORATED 502 3 EXTRA-THIN MOVEMENT THE REFINED CASE (9.5MM HIGH) CARRIES A DOMED AND WITH AUTOMATIC WINDING. IT OWES ITS SLIM PROFILE FLUTED BEZEL. CRAFTED FROM 18K YELLOW GOLD OR (3.65MM) TO AN OPEN BARREL AND OFFSET ROTOR. 18K WHITE GOLD, ITS TRANSPARENT BACK SHOWS OFF  $\underline{\mathsf{IIII} \cdot \mathsf{BVLGARI} \; \mathsf{OC} \mathsf{TO} \, \mathsf{FINISSIMO} \, \mathsf{ULTRA}}. \, \mathsf{BVLGARI} \; \mathsf{CLAIMED}$ S EIGHTH RECORD FOR THINNESS IN 2022 WITH THE II · PIAGET POLO PERPETUAL CALENDAR ULTRA-THIN. OCTO FINISSIMO ULTRA, A WATCH SHOWING HOURS. MINUTES AND SECONDS THAT MEASURES A TINY 1.8MM ULTRA-THIN WATCHES HAVE ALWAYS HELD A SPECIAL PLACE AT PIAGET. UNTIL NOW, THESE WAFER-THIN MOVE-

FIRMED ITS EXPERTISE.

IN ULTRA-THIN MOVEMENTS, BVLGARI HAS AMPLY CON-



ACHIEVE AN OVERALL THICKNESS OF 10MM, A SMALL DIF-

FERENCE BUT A HUGE IMPACT ON THE WATCH'S VISUAL

PROFILE AND COMFORT ON THE WRIST. VI - GRAND SEIKO ELEGANCE COLLECTION SBGW295 110th ANNIVERSARY, THIS ELEGANT RE-CREATION OF THE FIRST GRAND SEIKO WATCH FROM 1960 FEATURES AN EMBOSSED EXPRESSION OF MAKI-E, A TRADITIONAL TECHNIQUE OF DECORATING URUSHILACQUER BY SPRIN-KLING IT WITH PURE GOLD POWDER, THE CASE HAS A THICKNESS OF 10.9MM AND USES BRILLIANT HARD TITA-NIUM, WHICH MELDS LIGHTNESS WITH ROBUSTNESS.

SENTED A SERIES OF EXCLUSIVE TIMEPIECES INCLUDING THIS ONE, FROM THE LONGINES MASTER COLLECTION. IN GOLD WITH A GRAINED ANTHRACITE DIAL. MEASUR-ING 40MM IN DIAMETER, IT RUNS OFF AN EXCLUSIVE LONGINES CALIBRE WITH A SILICON BALANCE SPRING.





**34** WATCH YOUR TIME **ELEGANCE** 

by the likes of Elizabeth Taylor and Ursula Andress, and boasting dials in an array of colourful hard stones, they were sculptures for the wrist, in white or yellow gold. Meanwhile, the ultra-thin watch became a symbol of masculine elegance. In one famous photograph, Alain Delon has accessorised his tuxedo with a Piaget dress watch in white gold.

While it would be true to say that almost every one of the major brands making watches today is attentive to the elegance thinness confers — Audemars Piguet, Chopard, Jaeger-LeCoultre, Longines and Grand Seiko are examples —, one in particular stands out for its achievements in this domain, and that is Bvlgari. In 2012 the Roman firm embarked on a trajectory to define a quintessentially Italian elegance made possible by typically Swiss technique. This exercise in style is captured in the Octo Finissimo, a collection of ultra-thin watches which, in the space of a decade, has garnered no fewer than 60 international awards and achieved eight world records. The latest to date goes to the Octo Finissimo Ultra, an impossible 1.8 millimetres high.

### Record breakers

Following its acquisition of Daniel Roth and Gérald Genta in 2000, Bylgari found itself in possession of a vast mechanical legacy. Preferring to focus on the Bylgari name, the question became how to transfer this horological expertise to what was essentially a jewellery brand with a distinctly Italian personality. The vast majority of extra-thin watches in the early 2000s were round and cased in gold. By now the techniques required to produce wafter-thin mechanisms were

tried and tested, but the segment was in need of a breath of fresh air. Italian design language was exactly what was required: in 2012 Bvlgari introduced the Octo Finissimo, a watch that is octagonal, not round, made not from gold but titanium and with an integrated bracelet instead of the usual leather strap. Because the brand now had the technical capacities to produce its movements in-house, ultra-thin mechanisms were about to become the next giant leap for fine watchmaking, assisted in this by state-of-the-art machining processes. Though still elegant, extra-thin watches had been stuck in the Sixties. Now that would change. The Octo Finissimo is rightly considered as the archetype of an imaginative, contemporary, groundbreaking watch.

Then, out of nowhere, came Richard Mille, departing from its usual terrain of futuristic materials in the service of extreme complications to enter the world of extra-thin. As a new partner to Ferrari, in 2022 it presented the RM UP-01 Ferrari, created for the Maranello carmaker. The titanium case measures an insane 1.75 mm high and houses a manual-winding movement just 1.18 mm thick, setting a new world record. This is thinness taken to within a hair's breath of its physical limits. Whereas the Ultra shaves off millimetres by having the back of the case double as the mainplate, the RM UP-01 retains the conventional architecture of a movement inserted into a case but several components, such as the escapement, have been re-engineered to reduce height. A far cry from mid-century dress watches, the Octo Finissimo Ultra and the RM UP-01 redefine ultra-thin elegance for the twenty-first century.













I - RICHARD MILLE RM UP-01 FERRARI. CREATED IN HONOUR OF THE BRAND'S PARTNERSHIP WITH FERRARI, THE RM UP-01 IS THE THINNEST WATCH IN THE WORLD AT A REMARKABLE 1.75MM HIGH. SHOCK-RESISTANCE IS GUARANTEED BY THE TRADITIONAL CONSTRUCTION OF A MOVEMENT FITTED INSIDE A TITANIUM CASE.

II · SANTOS-DUMONT DE CARTIER WATCH. THIS SANTOS-DUMONT EXTRA-LARGE MODEL IN PLATINUM, WITH A GUILLOCHÉ-EFFECT DIAL AND RED JASPER NUMERALS, IS EQUIPPED WITH CALIBRE 430 MC, A MANUAL-WINDING, IN-HOUSE MOVEMENT DISTINGUIS

III-PANERAI LUMINOR DUE 38 MM. SMALLER AND LIGHTER WITH A PARED-BACK AESTHETIC, THE 38MM LUMINOR DUE WATCHES RETAIN ALL THE MECHANICAL PRECISION OF THEIR PREDECESSORS IN THE AUTOMATIC P.900 CALIBRE. THE PERFECT WATCH FOR THE EVERYDAY CITY-LIVING WARDROBE.

IIII- MONTBLANC STAR LEGACY ORBIS TERRARUM. THIS
WATCH IS DRIVEN BY AN AUTOMATIC MOVEMENT WHOSE
MANUFACTURE COMPLICATION PROPOSES A WORLDTIME
FUNCTION THAT IS ELEGANT BUT ALSO SIMPLE TO SET
AND READ. ONCE ADJUSTED, IT INDICATES THE TIME IN
ALL 24 TIME ZONES AT A GLANCE, AND SHOWS WHETHER
IT IS DAY OR NIGHT IN THE CORRESPONDING CITIES.

V-FREDERIQUE CONSTANT SLIMLINE MONOLITHIC MANUFACTURE. FREDERIQUE CONSTANT UNVEILS A MAJOR TECHNOLOGICAL BREAKTHROUGH IN THE FORM OF THE MONOLITHIC OSCILLATOR. ETCHED FROM A SILICON WAFER, IT OPERATES AT 40 HZ: TEN TIMES THE STANDARD RATE. ITS REDUCED SIZE (9.8MM DIAMETER × 0.3MM HEIGHT) IS DESIGNED TO FIT INTO A TRADITIONAL MOVEMENT CONFIGURATION FOR SERIES PRODUCTION.

WI-RADD FLORENCE CLASSIC. THE SOARINGTOWERS AND MAJESTIC DOMES OF RENAISSANCE FLORENCE ARE GIVEN A CONTEMPORARY INTERPRETATION IN THE ELEGANT, HARMONIOUS DESIGNS OF THE FLORENCE COLLECTION IN POLISHED STAINLESS STEEL. THESE SLIM WATCHES, ON BRACELETS WITH A SEVEN-LINK CONSTRUCTION, ARE PRESENTED AS MEN'S AND WOMEN'S VERSIONS.

VII - SEIKO KING SEIKO 61.35. THOUGH IT WAS NOT THE FIRST KING SEIKO WATCH, THE 1965 KSK WAS, WITH ITS SHARP, ANGULAR CASE AND HIGH FUNCTIONALITY, THE ONE THAT ULTIMATELY DEFINED KING SEIKO'S CHARACTER WITH ITS RESISTANCE TO WATER AND USE OF A HACKING SECONDS HAND. TODAY, SEIKO INTRODUCES TWO NEW TIMEPIECES INSPIRED BY THE CLASSIC KSK, EACH POWERED BY THE SLIMLINE CALIBER 61.35.



Introduced in 1931 and designed originally for polo players, the Reverso exists almost independently of its creator, having become one of the most recognisable and identifiable designs in the history of watchmaking. When Jaeger-LeCoultre celebrated this icon's 90th anniversary in 2021, it described it as "eternally modern, daring always to be itself, without compromise, through nine decades of social change, shifting tastes and advancing technology. During the last 30 years, thanks to the revival of mechanical watchmaking and the blossoming of the artistic crafts, the Reverso has fulfilled a potential that could not have been imagined at the time of its creation."

Reverso with its swivel case and the many versions created by the "Grande Maison de la Vallée de Joux", as Jaeger-LeCoultre is affectionately known. This year, however, the Manufacture is emphasising what is perhaps a less-er-known aspect of the Reverso's success: the golden ratio or "divine proportion" that presided over its creation. Since the mid-nineteenth century, this ratio, described by the Greek mathematician Euclid, has appeared in countless areas of the arts and science, becoming a formula for beauty. Jaeger-LeCoultre has embraced this idea in a celebration of, in its words, a "mystical number represented by the Greek letter Phi (Φ) and recognised as a universal signifier of beauty and harmony."

Every watch enthusiast is familiar with the story behind the

This golden ratio represents the unique relationship

JAEGER-LECOULTRE REVERSO HYBRIS ARTISTICA CALIBRE 179. THE REVERSO CONFIRMS IT IS A CONSTANT SOURCE OF INSPIRATION FOR JAEGER-LECOULTRE, WHICH PRESENTS THE REVERSO HYBRIS ARTISTICA CALIBRE 179. THE MOVEMENT, CALIBRE 179, BENEFITS FROM THE FOURTH EVOLUTION OF THE GYROTOURBILLON. IT IS ALSO A DUOFACE MOVEMENT, HENCE DISPLAYS A DIFFERENT TIME ZONE ON EACH DIAL WITH A DAY/NIGHT INDICATION ON THE REVERSE DIAL. THE DECORATION OF THESE TWO "FACES" GIVES EACH A DISTINCTIVE PERSONALITY. ASSEMBLED FROM 123 COMPONENTS, THE GYROTOURBILLON COMPRISES A TITANIUM CARRIAGE AND A PERIPPIERAL CARRIAGE MOUNTED ON BALL-BEAR-

whereby the ratio of a larger part to a smaller part is the same as the ratio of the larger part to the whole, and can be simplified as 1.618. Any object that respects this proportion will instinctively appear as aesthetically pleasing to our eyes. "In watchmaking, no timepiece expresses this principle better than the Reverso," writes Jaeger-LeCoultre. "While many variations of the Reverso case have been presented over the decades since its creation, the original proportions have remained as an anchor for the collection, and the golden ratio continues to define the Reverso's design today." This specificity, says Jaeger-LeCoultre CEO Catherine Rénier, also explains why the Reverso, now an icon among form (non-round) watches, is so instantly recognisable. Firmly established in Europe, the Manufacture intends to extend this fame to all its main markets.

### Métiers Rares

Naturally, the Reverso features prominently among this year's releases, starting with two standout executions: the Reverso Tribute Chronograph and the Reverso Tribute Duoface Tourbillon. The Chronograph version is fitted with Calibre 860, which combines a retrograde chronograph with a double-sided time display, while the Tourbillon version is driven by Calibre 847, an extra-thin flying tourbillon movement that measures 3.90mm high. It displays a second time zone and a day-night indicator on the reverse dial. Without doubt the most spectacular of these

INGS. THESE TWO ELEMENTS TURN PERPENDICULARLY TO EACH OTHER AT DIFFERENT SPEEDS: ONCE EVERY 16 SECONDS FOR THE INNER CARRIAGE AND ONCE PER MINUTE FOR THE PERIPHERAL CARRIAGE, WHICH ALSO PROVIDES A SMALL SECONDS FUNCTION. CLOSER INSPECTION REVEALS A SEMI-SPHERICAL BALANCE SPRING AS WELL AS THE GYROLAB BALANCE WHOSE DOUBLE-ANCHOR SHAPE REDUCES AIR FRICTION. THIS COMPLEX MOVEMENT IS HOUSED IN A 51 × 31MM CASE IN ROSE GOLD. PRODUCTION IS LIMITED TO TEN PIECES...

new releases, the Reverso Hybris Artistica Calibre 179 offers a demonstration of Jaeger-LeCoultre's watchmaking prowess in its triple-axis Gyrotourbillon, as well as an illustration of the skills of the Manufacture's craftsmen and women in the skeletonwork and lacquerwork applied to the movement.

These Métiers Rares (rare crafts) are also showcased in the Reverso One Precious Colours series of enamelled jewellery pieces, which includes the Reverso Secret Necklace. Subtly enhanced with diamonds and onyx, this elegant and refined secret watch is worn on a long chain. Jaeger-LeCoultre is justifiably proud of this expertise which it safeguards and encourages, not least through its training centre where the next generation of craftsmen and women perfect these skills. The Manufacture is also extending its support to the wider crafts community through a Fellowship, in partnership with the Michelangelo Foundation. In this first year, twenty participants will benefit from an entrepreneurial masterclass developed with ESSEC Business School. completed by a six-month placement in the workshop of a master artisan in various European countries. The objective of this programme, says Catherine Rénier, is to "facilitate the transmission of skills and enable young talents to take their first steps towards a profession in the crafts sector. It's important that we give a voice to these manual skills

JAEGER-LECOULTRE REVERSO TRIBUTE CHRONOGRAPH. THE REVERSO WAS ONE OF THE FIRST TIMEPIECES DESIGNED TO BE WORN WHILE PLAYING SPORT, WITH A CASE THAT COULD BE SWIVELLED TO PROTECT THE DIAL DURING POLO MATCHES. THIS NEW MODEL REFERENCES THE REVERSO CHRONOGRAPH THAT JAEGER-LECOULTRE RELEASED IN 1996. IT RUNS OFF CALIBRE 860, A NEW MOVEMENT THAT COMBINES A CHRONOGRAPH WITH A DOUBLE-SIDED TIME DISPLAY. DISCREETLY ELEGANT, THE FRONT DIAL HAS ALL THE HALLMARKS OF THE REVERSO TRIBUTE LINE. TURNING THE CASE OVER REVEALS THE CHRONOGRAPH MECHANISM, INCLUDING THE CÔTES DE GENÊVE DECORATION ON THE BRIDGES, THROUGH THE FULLY SKELETONISED DIAL.





HERMÈS HOB. THE HERMÈS HOB IS A CONTEMPORARY, OBJECT; A MIX OF TENSION AND FLUIDITY, BALANCE AND CONTRAST. LIGHTWEIGHT YET ROBUST, ITS CUSHION CASE TREATED TITANIUM BACK. A BEZEL AND A CROWN IN BLACK CERAMIC ADD FURTHER CONTRAST.

JAEGER-LECOULTRE REVERSO TRIBUTE CHRONOGRAPH. THE T SANTOS DE CARTIER. THE SANTOS RECONCILES CLASSIREVERSO WAS ONE OF THE FIRST WRIST WATCHES DESIGNED CISM WITH A PIONEERING MINDSET IN ITS GEOMETRIC LINES. REVERSO WAS ONE OF THE FIRST WRISTWATCHES DESIGNED TO BE WORN WHILE PLAYING SPORT, WITH A CASE THAT CAN BE SWIVELLED TO PROTECT THE DIAL. THIS NEW REVERSO RETURNS TO THE ORIGINS OF THIS WATCH. INSPIRED BY THE REVERSO CHRONOGRAPH RELEASED IN 1996, IT RUNS OFF CALIBRE 860, A NEW MOVEMENT THAT COMBINES A CHRON-OGRAPH WITH A DOUBLE-SIDED TIME DISPLAY.

PURE DESIGN AND TECHNICAL INNOVATION. IMAGINED IN 1904 AND MODERN BEFORE MODERN EXISTED, IT EMPHA-PRINCIPLES CLOSE TO THE HEART OF ALBERTO SANTOS-DUMONT, FOR WHOM CARTIER CREATED A WATCH HE COULD CONSULT WHILE FLYING HIS PLANE.

FUSES WHITE AND BLACK CERAMIC, A PROCESS REQUIR-ING SPECIALIST EXPERTISE, INTO A PIXELLATED DESIGN. OUENT INTERPRETATIONS, THE RADIOMIR OTTO GIORNI IS CASED IN A 38MM DIAMETER, ITS CALIBRE 12.1 MOVE-MENT IS COSC-CERTIFIED AND DELIVERS 70 HOURS OF

PANERAI RADIOMIR OTTO GIORNI. A TRIBUTE TO THE ORIG-INAL RADIOMIR THAT WOULD SHAPE THE MANY SUBSE-INSPIRED BY THE FIRST RADIOMIR PROTOTYPE FROM 1935, WHICH MEASURED 47MM IN DIAMETER. CONTAINED IN A BREGUET TYPE XX CHRONOGRAPH 2067. CARRYING ON A LONG TRADITION OF AVIATION WATCHES, BREGUET PRE-SENTS A NEW TYPE XX IN A 42MM STEEL CASE, POWERED BY AN AUTOMATIC FLYBACK CHRONOGRAPH MOVEMENT ON A FULL WIND, WEAR IT ON A LEATHER OR A NATO STRAP.

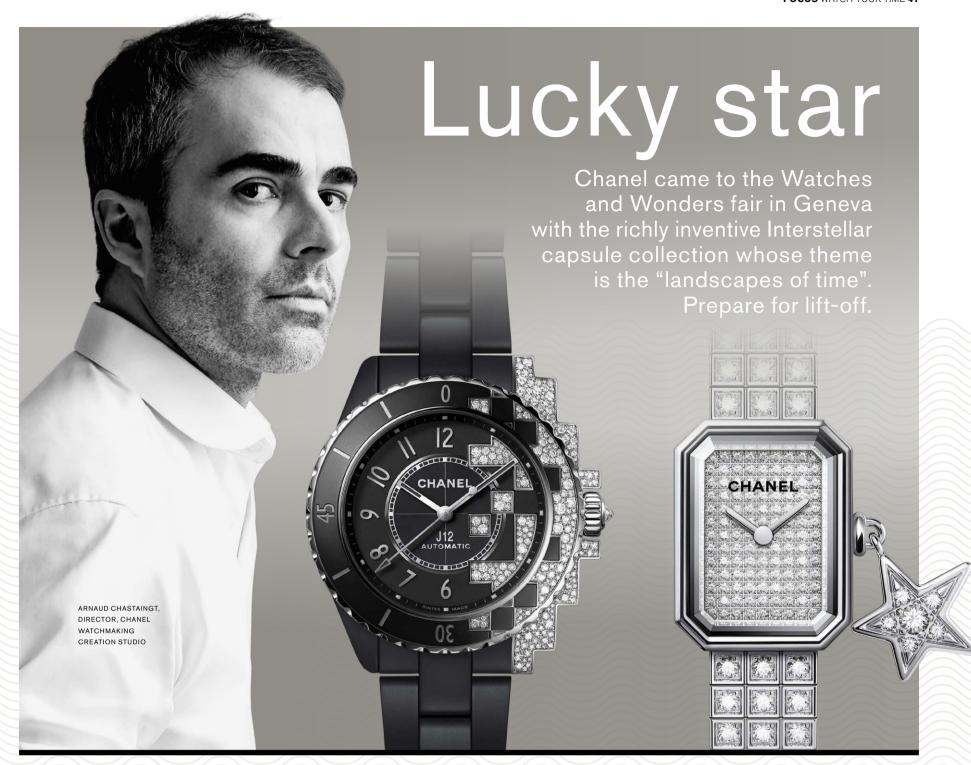
ROLEX OYSTER PERPETUAL YACHT-MASTER 42. ROLEX PRE-SENTS A NEW INTERPRETATION OF THE YACHT-MASTER 42, A WATCH DESIGNED WITH SAILING IN MIND. FITTED WITH AN OYSTER BRACELET, THIS IS THE FIRST EXECUTION IN RLX TITA-BLACK CERACHROM INSERT CONNECTS THIS VERSION TO THE ORIGINAL YACHT-MASTER 42MM INTRODUCED IN 2019

GRAPH 41MM. STEEL MAKES ITS DEBUT IN THE CODE 11.59 COLLECTION, WITH A MODEL PROPOSED AS AUTOMATIC AND AUTOMATIC CHRONOGRAPH VERSIONS. ALSO NEW IS THE STAMPED DIAL WHOSE SPECIALLY-CREATED PATTERN EFFECT THAT ENHANCES LEGIBILITY.

BON TPT®, THIS RM 65-01 IS THE MOST COMPLEX RICHARD MILLE CHRONO TO DATE WITH 480 COMPONENTS. AN INTE-GRATED AUTOMATIC SPLIT-SECONDS CHRONOGRAPH, IT INCORPORATES A DATE DISPLAY, FUNCTION SELECTOR AND QUENCY CALIBRE DELIVERS 1/10TH OF A SECOND PRECISION - BUT WITH A 1/5TH OF A SECOND SCALE FOR LEGIBILITY

GALLERY WATCH YOUR TIME 39





Spacesuits would have been appropriate attire for anyone entering the Chanel booth at the Watches and Wonders fair, held in Geneva at end March. The immaculate white space — more starship than booth — prepared visitors for a voyage to distant galaxies; an Interstellar journey, from the name given to the capsule collection designed by the head of Chanel's Watch Creation Studio, Arnaud Chastaingt. "I was inspired by what I call the 'landscapes of time'," he explains. "Firstly because they are staggeringly beautiful, from the stars in the night sky to the images taken by the Hubble space telescope, which really look like sets from a movie. Then there are the representations that our imagination has always produced when thinking about the future, especially in science fiction."

Spacecraft, space stations, robots and lunar modules populate these landscapes, forming an aesthetic that has always fascinated Chastaingt. From scientific explorations of the universe to time travel, he delved into "journeys in reality or fantasy, dreams prompted by an unquenchable thirst for knowledge." His approach when designing the collection was that of a film director, inventing a story to be played out by the "actors" of this intergalactic saga, namely the watches in the Chanel collections. Astronomical phenomena and observations of the stars and planets were one source of inspiration, in particular

CHANEL J12 HYPER CYBERNETIC. THE J12 CYBERNETIC AND J12 HYPER CYBERNETIC EXPERIMENT WITH PIXELS: INDIVIDUAL UNITS OF COLOUR WHICH, MULTIPLIED BY THOUSANDS, EVEN MILLIONS, FORM A COMPUTER IMAGE. SCALED-UP PIXELS SPREAD OUT FROM THE RIGHT SIDE OF THE DIAL, ALONG THE CASE AND ONTO THE LUGS OF THESE J12 WATCHES, CREATING A JAGGED EDGE. THE J12 CYBERNETIC IN BLACK AND WHITE CERAMIC BENEFITS FROM ADVANCED TECHNOLOGY FIRST

eclipses. This dialogue between light and shade became the foundation for the J12 Eclipse box set which, in a suite of seven watches that transition from all-white to all-black, recounts the gradual disappearance of one star in the shadow of another. In a similar vein, the two J12 Spatiotemporal form an alliance of opposites through interlocking black and white ceramic. On one, a quarter of the dial is black, on the other, it is white. Both are partially paved with baguette diamonds.

### Space and time

Reaching out to the latest technology, the Interstellar collection introduces elements from the digital world. For this, Chanel has applied its avant-garde fused ceramic technology to combine black and white ceramic on the same watch. "We're surrounded by digital images," says Arnaud Chastaingt. "They are part of our reality and have even invited themselves into our dreams, as though our inner worlds were becoming digitized. I used the pixel, which is the basic unit of digital images, as a starting point." Digital images are made up of a multitude of pixels which are reproduced, enlarged, on the right side of the dial of the J12 Cybernetic and the J12 Hyper Cybernetic. This pixelated appearance, in black and white ceramic on the Cybernetic and in black ceramic and diamonds on the Hyper Cybernetic, extends to

SEEN IN 2020, ON THE J12 PARADOXE, THAT FUSES DIFFERENT COLOURED CERAMICS ON A SINGLE WATCH. LIMITED TO 55 PIECES, THE J12 HYPER CYBERNETIC PAIRS BLACK CERAMIC WITH WHITE GOLD AND IS SET WITH 240 DIAMONDS ON ITS CASE, BEZEL AND DIAL. BOTH WATCHES ARE POWERED BY THE AUTOMATIC CALIBRE 12.1 MOVEMENT. MANUFACTURED BY KENISSI EXCLUSIVELY FOR CHANEL, IT IS CHRONONOMETER-CERTIFIED BY THE COSC AND HAS A POWER RESERVE OF 70 HOURS.

the case and lugs. Such a "perfect alliance" of black and white is, of course, indissociable from Gabrielle Chanel, who appears on the dial of the Mademoiselle J12 Cosmic in black ceramic. Another tribute to the founder of the Parisian house, the white ceramic J12 Cosmic features a dial scattered with diamonds and symbols to create a cosmic frieze.

While there isn't room here to list every piece in this vast and varied collection, we can mention the J12 Interstellar whose deepest black and glittering dial, embellished with diamonds, evoke an astronaut's view of space; the fully diamond-paved Première Hyper Lucky Star and the Première Robot with its quirky, three-dimensional android. From darkness to transparency: the case and bracelet of the J12 X-Ray Star are made from sapphire crystal, which has been frosted or "frozen" to stunning effect. Not forgetting the Première Camélia X-Ray, the first watch to house Chanel's Calibre 2 skeleton movement in a sapphire case. One final mention goes to the Monsieur Tourbillon Meteorite which is "dressed in a shooting star". Openworked areas in the grey meteorite dial offer glimpses of the in-house Calibre 5.1. The tourbillon carriage is decorated with a sculpted lion's head. Wherever Chanel lands its spacecraft, its lion — the hallmark of excellence will be there, roaring at the stars. Eric Dumatin

CHANEL PREMIÈRE HYPER LUCKY STAR. PART OF THE INTERSTELLAR CAPSULE COLLECTION, THIS 55-PIECE LIMITED EDITION IN WHITE GOLD IS AWASH WITH 284 BRILLIANT-CUT DIAMONDS, WITH 116 DIAMONDS ON THE DIAL, 162 DIAMONDS ON THE BRACELET AND SIX DIAMONDS ON THE WHITE COMET CHARM THAT HANGS FROM THE CROWN. IN REFERENCE TO CHANEL'S FIRST HIGH JEWELLERY RANGE, THE BIJOUX DE DIAMANTS COLLECTION FROM 1932, THIS PREMIÈRE WATCH EXPRESSES FREEDOM OF MOVEMENT IN ITS "TENNIS" BRACELET, WHOSE SUPPLE CONSTRUCTION PERFECTLY FITS THE CURVE OF THE WRIST.

42 WATCH YOUR TIME FOCUS

FOCUS WATCH YOUR TIME 43



It is a legend among contemporary watches, arguably the greatest of all time and one of the most lusted-after. In celebration of the Daytona's 60th anniversary, Rolex has revisited the jewel in its coronet. One thing, however, hasn't changed: it is still (almost) impossible to obtain.

— Michel Jeannot

Let's not beat about the bush: there is no other watch like the Rolex Cosmograph Daytona. An icon if ever there was, it continues to fill pages in one of the most fascinating chapters in the history of watchmaking. The first fans of the Daytona chronograph — the same models that now send auction prices through the roof and collectors into a spin — were its original audience of professional racecar drivers. However, all the attributes of this future global phenomenon were already in place and it wouldn't be long before the Daytona's fame spread beyond the racing circuit.

### Leading the field

The legend took off on Daytona Beach, Florida, a stretch of hard-packed sand where drivers competed in some of the very first high-speed motor races. Early on, Rolex forged links with the US resort and with some of these speed kings... including Sir Malcolm Campbell, who between 1924 and 1935 set nine land speed records, including five on Daytona Beach. In 1935, at the wheel of the Blue Bird, he became the first person to break the 300 mph (482 kph) barrier. The watch on his wrist? A Rolex. In a telegram which he addressed to the brand in Geneva, he observed that "the Rolex watch is still keeping perfect time — I was wearing it yesterday when Blue Bird exceeded 300 mph." To all intents and purposes, Campbell was the first Rolex Testimonee in motorsports.

When in 1959 the action moved from the beach to the newly inaugurated Daytona International Speedway, Rolex was in pole position. The man behind the construction of the track, William France Sr., wore a Rolex and so the brand became the Official Timepiece of the Daytona International

Speedway. This connection prompted Rolex management in the United States to ask for the Daytona name to be printed on the dial of chronographs destined for the US; a feature that was gradually extended to all markets. In 1992 Rolex became the Title Sponsor of the 24 Hours of Daytona. The most prestigious race in the United States, it was renamed the Rolex 24 At Daytona. The winning drivers are presented with an exclusive Cosmograph Daytona with the year and 'Winner' engraved on the caseback. To quote the brand, "the drivers who take part in this race dream of being able to wear a Daytona thanks to an achievement that would earn universal respect: winning it."

### An original bezel

When Rolex launched the Cosmograph (a name it invented) in 1963, it had been making chronographs for three decades already and was now intent on producing a new-generation chrono specifically for racing drivers, exactly as it had done ten years earlier with the Explorer, designed for mountaineers and adventurers, and the Submariner, for deep-sea divers. Retailing in the United States for \$210, the new Professional chronograph reference 6239 — powered by a manual-winding Valjoux calibre — was designed as a practical, functional instrument with clearly legible indications, including contrasting colours for the chronograph counters. Most importantly, the tachymeter scale migrated from the dial to the bezel. This would be the distinguishing feature of the first Cosmograph (not yet the Daytona) in history.

The version introduced two years later replaced the pump pushers of the original model with screw-down chronograph pushers. By preventing water from seeping into the case, they reinforced the Oyster concept and, in testimony to this, the Oyster name was added to the dial. New dials were also introduced during these years including one, the exotic dial with square hash marks on the chrono counters, whose destiny was secured as the watch Paul Newman wore. The actor, whose role as a racing driver in Winning (1969) sparked his passion for motor sport, wore an exotic-dial Daytona gifted to him by his wife, with the engraved message "Drive Carefully Me" on the caseback. (Rolex ceased production of the exotic dial in the late 1970s).

### With a little help from Paul...

Photographs of Newman wearing his Cosmograph, including on the front cover of an Italian magazine in the early 1980s, fuelled enthusiasm for this model. It even earned a nickname: the Paul Newman Daytona or PND as it's known in collectors' circles. Prices went full-throttle. A Paul Newman Daytona that would have fetched around \$9,000 at auction in 1992 now sells for upwards of \$200,000. History was made in 2017 when the actor's personal Daytona, the one with the engraved back, hammered for \$17.8 million (including buyer's premium). The most ever paid for a Rolex at auction.

The brand introduced subtle evolutions to its Cosmograph Daytona — an icon must be treated with respect — prior to a major mechanical and aesthetic overhaul in 1988. Henceforth the Daytona was fitted with an automatic movement (a Zenith El Primero with more than half its components modified to Rolex requirements) that was chronometer-certified by the Contrôle Officiel Suisse des Chronomètres (COSC). The case increased in size

from 36mm to 40mm and incorporated shoulders to protect the crown. The tachymetric bezel was made wider and engraved with a 400-unit graduated scale. This new model met with phenomenal success and contributed to a surge of renewed interest in mechanical watches — the flipside being that production struggled to keep pace with demand, particularly for steel.

With the new millennium came another milestone. The Cosmograph Daytona introduced in 2000 kept the same design but innovated in terms of what lay under the hood. For the first time in its history, the Cosmograph Daytona was powered by an in-house automatic movement, calibre 4130. Technical solutions included a 60% reduction in the number of components for the chronograph mechanism, for greater reliability, and the introduction of a Parachrom balance spring. A keen observer will see that the chronograph minute and hour counters are aligned slightly above the centre of the dial. In 2016 the aesthetics of the Cosmograph Daytona in steel were boosted by the addition of a Cerachrom ceramic bezel that is smoother, more lustrous and more scratch-resistant than the engraved metal bezel.

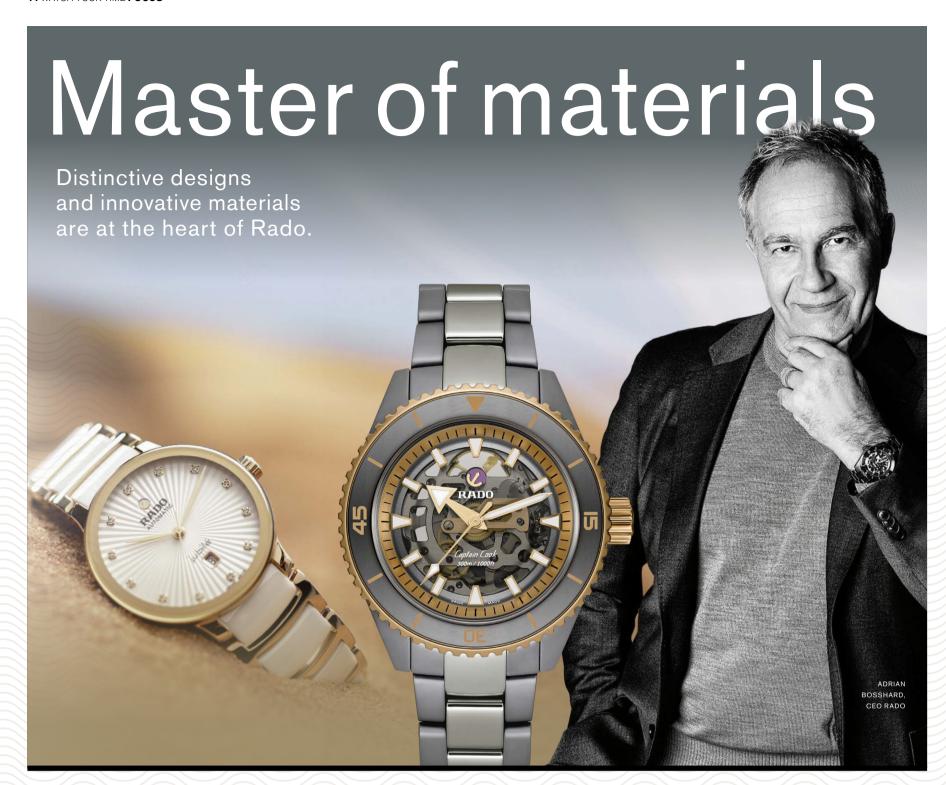
### **New transparency**

For the Cosmograph's 60th anniversary this year, Rolex has introduced a number of evolutions and refinements. The dial has been subtly redesigned and the contrast between the dial and the counters is accentuated. The case is 0.2mm thinner on versions with a solid back and the Cerachrom ceramic bezel is edged with the same metal as the case. However, the major innovation has to be the

new calibre 4131 which incorporates all the latest technical advances by the brand, including a Chronergy escapement to reduce energy loss, Paraflex shock absorbers to protect the heart of the movement, and an optimised ball bearing for improved automatic winding. This new movement also features a cut-out oscillating weight and, on the bridges, an exclusive Rolex Côtes de Genève decoration. On the version in 950 platinum, these details can be enjoyed through a transparent caseback in sapphire: a first for the Oyster Perpetual collection.

The cherry on the cake: in June, for the centenary edition of the 24 Hours of Le Mans endurance race, Rolex took the wraps off a special Cosmograph Daytona. It too has a transparent back that shows off the exclusive calibre 4132 movement. An evolution of calibre 4131, it incorporates an additional mechanism, developed and patented by Rolex, which counts chronograph hours over 24 hours (instead of the model's usual twelve). The case is crafted in 18k white gold and topped with a black Cerachrom bezel. The '100' mark on the tachymeter scale is picked out in red. Referencing a vintage Rolex, the reverse panda style sets white counters against a black dial.

The Cosmograph Daytona has evolved over its 60 years but some things never change: when hoping to buy this now legendary watch, patience is a virtue not to be overlooked!



Rado certainly lives up to its philosophy that "If we can imagine it, we can make it. And if we can make it, we will!". Over the course of its century-long history, the brand has made its mark as one of the most creative in terms of design and one of the most advanced in its use of innovative materials, in particular ceramic. "Established in 1917 in Longeau by the Schlup brothers, Rado now employs 600 people, with around half in Switzerland and half worldwide," CEO Adrian Bosshard explains. "Our strengths are a unique design language, embodied by the DiaStar and the Captain Cook, whose 60th anniversaries we celebrated last year, and our capacity to produce almost every single component in-house. We are the 'master of materials' and this distinguishes us from other brands. It's a definite asset."

This "mastery" is amply illustrated by the DiaStar1. Launched in 1962 and marketed as the world's first scratchproof watch, it introduced hard metal and sapphire crystal to watch production. But it would be another substance — ceramic — that became Rado's material of choice. Over the years, the brand would develop unparalleled expertise in the transformation of zirconium oxide powder, and in the production of ceramic alloys and coloured ceramic: a perilous exercise

RADO CENTRIX. THE SOFTER, SENSUOUS CONTOURS OF THE LATEST CENTRIX IN STEEL, FINISHED WITH A ROSE-GOLD-COLOURED PVD TREATMENT, SUGGEST THE WINDSWEPT BEAUTY OF SAND DUNES. IT COMES IN DIFFERENT SIZES, IN SLIGHTLY LARGER, MORE EXPRESSIVE DIMENSIONS THAN THE EARLIER LINE, WITH A WIDER DIAL OPENING TOPPED BY A CRYSTAL THAT RUNS FULLY TO THE CASE EDGE. HOURS ARE MARKED WITH 12 DIAMONDS ON THE FACETTED AND LACQUERED DIAL. WORN ON AN INTEGRATED STEEL AND CERAMIC BRACELET, IN 30.5MM AND 39.5MM DIAMETERS, THE NEW CENTRIX IS PROOF THAT "SIMPLICITY IS THE SOUL OF ELEGANCE".

if ever there was. Today, ceramic has entered the horological mainstream but forty years ago, in 1986 to be precise, when Rado released its first ceramic watch, the Rado Integral, followed in 1990 by the Rado Ceramica, it was nothing short of revolutionary. This innovative material also served Rado's belief that design was a key element of its watches, and that they should be given a distinctive aesthetic.

### Innovation and design

When it comes to ceramic, Rado has raised the bar in terms of colour choices and quality. Alongside high-tech ceramic in a vast palette of shades, it proposes plasma high-tech ceramic, a material distinguished by its liquid-metal appearance without containing even a speck of metal. More recently, Rado unveiled Ceramos™, which it describes as "a marriage of high-tech ceramic and metal that offers the optimal properties of both components: the lightness and durability of ceramic and the irresistible lustre of metal." This material can, says Rado, be produced in a variety of colours including platinum, gold and rose gold. Another revolution.

This command of the high-tech materials that make up its cases and bracelets shouldn't detract from the

RADO CAPTAIN COOK HIGH-TECH CERAMIC SKELETON. RADO REAFFIRMS IT IS THE UNCONTESTED MASTER OF MATERIALS WITH THIS CASE IN PLASMA HIGH-TECH CERAMIC. INSIDE IS A RADO AUTOMATIC CALIBRE R808 SKELETON MOVEMENT WITH NEW GEOMETRY AND COMPONENTS SHADED IN DIFFERENT TONES, TO ALLOW A DISTINCT VIEW OF THE VARIOUS PARTS. SPECIAL FINISHING TOUCHES INCLUDE A HORIZONTALLY-BRUSHED MAIN PLATE AND A ROSE-GOLD-COLOURED MINUTE-WHEEL BRIDGE. THE MOVEMENT, EQUIPPED WITH AN ANTI-MAGNETIC NIVACHRON™BALANCE SPRING, HAS BEEN FULLY TESTED

importance Rado places on the movements inside. For this, it can count on ETA, which like Rado belongs to Swatch Group, and its next-generation movement production capabilities. Earlier this year, Rado unveiled two skeletonised models that expose their calibre like a kinetic artwork. After the True Square Skeleton, featuring a monobloc case and bracelet in high-tech ceramic, came the Captain Cook High Tech Ceramic Skeleton, powered by the R808 movement with a balance spring in Nivachron™, an anti-magnetic titanium alloy, and 80 hours of power reserve. Adventure-ready, the case, bezel insert and bracelet of this 300-metre water-resistant watch are in plasma high-tech ceramic.

Complementing these two releases, the brand has introduced new versions of the Centrix. In the brand's words, "It is no coincidence that this sensuous watch brings to mind the breathtaking, windswept beauty of the desert. The potent, mysterious grace of minerals and sand sculpted by time, in shades of gold, ochre and brown. Such imagery is familiar ground for the gifted watchmaker inventing art from high-tech ceramic, sapphire crystal and precision movements." What more can we say?

IN FIVE POSITIONS RATHER THAN THE USUAL THREE, AND PROVIDES 80 HOURS OF POWER RESERVE. THE DIAL ITSELF IS INTENTIONALLY SPARTAN, WITH SIMPLE GEOMETRIC INDICES AND HANDS, TREATED WITH SUPER-LUMINOVA® TO ENHANCE READABILITY IN LOW-LIGHT CONDITIONS. THE TITANIUM CASEBACK ALSO CARRIES A SAPPHIRE CRYSTAL FOR A CLEAR VIEW OF THE MOVEMENT WHILE THE SCREW-IN CROWN IS FINISHED WITH THE RADO ANCHOR SYMBOL.





Hyper materials

Vincent Daveau

Genius is the farthest extreme of the practical.

Jean Cocteau (1889 — 1963)

Watchmakers are deploying innovative, high-tech materials that satisfy customers' desire for ever greater exclusivity.

In an early — and rare — example of technology transfer, towards the late 1400s watchmakers borrowed the spring retainer that gunsmiths fitted in wheellock pistols and used it to make transportable timepieces, including the pocket watch. They then settled into their ways, reluctant to embrace any further change. Fortunately, casemakers were more adventurous. They sculpted cases from rock crystal to reveal the remarkable miniaturised mechanisms within, and fashioned protective covers out of hardened leather (cuir bouilli) studded with gold or silver rivets. Now the pride of museums, these elaborately ornamented timepieces were a sign of their owner's elevated position in society. Today's watches make use of innovative materials for much the same reason: to distinguish their owner from other enthusiasts in a game of horological one-upmanship.

### The heart of the matter

The first to show an engineer's mindset, and consider watchmaking through the lens of science, were the chronometer-makers of the eighteenth century. They experimented with alloys, as well as materials such as glass, platinum, mercury, wood, even diamond, in an attempt to improve timekeeping precision and protect mechanisms from corrosion. The real materials revolution, however, came much later, in the 1930s, and coincided with the watch's migration from pocket to wrist. Stainless steel cases minimised skin reactions caused by contact with allergen metals. At the same time, brands trialled new lubricants and discovered the benefits of synthetic jewels. Cases were designed to better protect movements that were more exposed to humidity, shocks and magnetic fields — still the enemy of a mechanical watch. And the list goes on, with balance wheels in beryllium bronze and balance springs made from alloys whose compositions are among the industry's best-kept secrets.

THE UNIQUELY JAPANESE BEAUTY OF THE VERY PLACES WHERE ITS WATCHES ARE MADE. THE DIA OF THIS SLGA019 IS A PERFECT EXAMPLE. IT MANIFESTS DIFFERENT BLUES, AS WHEN A BREEZE STIRS LOWER CENTRE OF GRAVITY, A PRINCIPLE OF GRAND SEIKO'S EVOLUTION 9 STYLE, ENSURES THE WATCH SITS FIRMLY AND COMFORTABLY ON THE WRIST. THE CALIBRE 9RA2 SPRING DRIVE MOVEMEN IS ASSEMBLED AT THE SHINSHU WATCH STUDIO AND CAPABLE OF APPROXIMATELY 120 HOURS

The balance and balance spring remain the subject of intense scientific research. Swatch Group and Audemars Piguet collaborated on research into titanium, subsequent to which, in 2017, Swatch Group announced the debut of balance springs in Nivachron™. Protected by four patents, this titanium alloy provides considerably improved resistance to magnetic fields (the reason countless watches find themselves back at after-sales service). Developments such as this could be brushed aside as minor advances... except they concern components, the balance and spring, that are critical to the watch's functioning. Dive watches are a case in point. The ISO 6425 standard stipulates that a dive watch must withstand a magnetic field of 4,800 ampere/metre or 60 gauss, which is roughly the strength of a fridge magnet. In Japan, Seiko and Grand Seiko manufacture balance springs in Spron, a proprietary nickel-cobalt alloy. Rolex has Parachrom, a paramagnetic alloy of niobium, zirconium and oxygen. The brand with the coronet also equips certain of its movements with silicon oxide balance springs; a material developed in partnership with Patek Philippe and Swatch Group.



### In great shape

Alpina is celebrating its 140th anniversary with an unusually classic timepiece from a brand that is better known for watches that are built to endure life in the great outdoors. The starting point for this commemorative edition was Calibre 490, a shaped movement released in 1938. Alpina has located enough examples of this calibre to produce two limited editions of 14 pieces each, which it has named the Heritage Carrée Mechanical 140 Years. These authentic manual-winding movements, which have a frequency of 2.5 Hz or 18,000 vibrations/hour, are housed in a rectangular silver case, typical of early twentieth-century form watches. The black dial version features a round small seconds subdial while the silver dial version has rectangular small seconds. Both versions have a railroad minute scale with radial indices and luminescent Arabic hour numerals. Completing this vintage tableau to perfection is an ostrich leather strap.

Established in 1883 by Gottlieb Hauser, a watchmaker and seller in Winterthur, Switzerland, Alpina originated as a corporation of Swiss manufacturers. Hauser and his associates operated in a way similar to that of the eighteenth-century établisseurs, assembling components which they bought in from independent manufacturers. Activity quickly expanded and from 1901 Alpina was making its own movements, of superior quality. Alpina also grew geographically. In addition to factories in Switzerland, it opened a branch in Glashütte, the home of German watchmaking, where production focused on sports watches.

The first of these, introduced in 1933, was the Blockuhr in steel. It laid the foundations for the Alpina 4. Released in 1938, it demonstrated the four most important characteristics of a sports watch, namely to be water-resistant, anti-shock, anti-magnetic and in stainless steel. This spirit of adventure continues through Alpina's present-day Alpiner (land), Startimer (air) and Seastrong (sea) collections, equipped with in-house



ALPINA ALPINER HERITAGE CARRÉE MECHANICAL 140 YEARS. ALREADY, IN 1938, CALIBRE 490 EMBODIED ALPINA'S EMERGING VISION. IT FEATURES A PATENTED CROWN THAT PROTECTS AGAINST DUST: A KEY DEVELOPMENT AS IT MADE THE CASE AIRTIGHT, A FIRST STEP ON THE WAY TO THE WATENTIGHT CASE THAT WOULD LATER BECOME STANDARD. THE MOVEMENT, PROTECTED BY SWISS PATENT NUMBER 158882, HAS A SIMPLE, ROBUST CONSTRUCTION BUT IS NO LESS PERFECTLY FINISHED. ALL LITS COMPONENTS ARE BEVELLED AND THE RATCHET IS SUN-BRUSHED. THIS IS A GENUINE IN-HOUSE CALIBRE, DESIGNED, ASSEMBLED AND FINISHED BY ONE OF THE FIRMS IN THE UNION HORLOGERE, ALPINA'S ORIGINAL ENTITY — A PARTICULARITY SELDOM SEEN IN THE 1930S WHEN GENERIC ÉBBUCHES (MOVEMENT BLANKS) WERE THE NORM AND MANUFACTURE MOVEMENTS THE EXCEPTION.

### Si-fiction

The silicon balance spring, whose patent entered the public domain in November 2022 after the first applications, by Ulysse Nardin, some fifteen years previously, is a potential gamechanger for mechanical movement production. Determined to stay in the game, Swatch Group, via the Omega Speedmaster Pro Racing, recently introduced a new type of silicon balance spring in the Spirate™System, which gains a tiny 0 to 2 seconds per day. No other series-produced movement attains such a level of precision. Using only mechanical means, Omega comes within a whisker of Grand Seiko's unique Spring Drive movement; a technology that combines the high torque of a mechanical watch with an electronic watch's precision regulation by an integrated circuit.

As the twentieth century drew to a close, another revolutionary technology — quartz — almost wiped out an industry entrenched in tradition. But mechanical movements hadn't said their last word and made a spectacular comeback as luxury timepieces. Anxious to protect these mechanical marvels, the result of unique expertise, from physical or aesthetic alteration, brands began to make those components most at risk

from materials that would withstand outside aggressions. Synthetic corundum is one example. Produced using the Verneuil flame-fusion process, discovered in 1900, synthetic ruby makes better quality movement jewels while synthetic sapphire gives tougher crystals to protect the watch's dial. Jaeger-LeCoultre's Reverso Dame was first to benefit, in 1931. In the early 1980s Rolex began to equip watches in its Professionnelle line with robust sapphire crystals, gradually extending this technology to all its collections.

### Forever beautiful

By the 1990s the majority of Rolex's competitors had adopted synthetic sapphire, some in more original ways than others. Blancpain uses a sapphire crystal insert for the rotating bezel on certain Fifty Fathoms while Chopard, with great imagination, machines the crystal and gongs of its most sophisticated striking watches from a single block of sapphire. Through time and money spent on research, certain brands are now able to machine sapphire to make cases (Richard Mille is at the forefront of this technology). They have also invested in the complex processes required to transform clear sapphire into coloured sapphire, one of the main difficulties being to









I- HUBLOT BIG BANG TOURBILLON AUTOMATIC
YELLOW NEON SAXEM. HUBLOT CONTINUES ITS
EXPLORATION OF SAXEM, AN ALLOY OF ALUMINIUM
OXIDE AND RARE EARTH ELEMENTS, TO OBTAIN
AN UNPRECEDENTED YELLOW NEON COLOUR.
THIS ULTRA-RESISTANT MATERIAL, PREVIOUSLY
SEEN ON THE BIG BANG MP-11, HAS A BRILLIANCE
GREATER THAN THAT OF SAPPHIRE.

II-CHOPARD L.U.C 1860. CHOPARD MANUFACTURE
TOOK INSPIRATION FROM THE FIRST WATCH IN THE
L.U.C COLLECTION, LAUNCHED IN 1997, FOR THIS
TIMEPIECE. THE CASE, 36.5MM IN DIAMETER AND
8.2MM HIGH, IS CRAFTED FROM LUCENT STEEL

WITH AN 80% RECYCLED STEEL CONTENT. PROOF OF ITS COMMITMENT TO SUSTAINABLE LUXURY, CHOPARD IS ROLLING OUT THIS STEEL TO ALL ITS WATCH COLLECTIONS.

III-RADO DIASTAR ORIGINAL. IN 2022 RADO CELE-BRATED THE DIASTAR'S 60TH ANNIVERSARY WITH NEW MODELS FEATURING COLOURED DIALS THAT ARE DRIVEN BY AN AUTOMATIC DAY-DATE MOVE-MENT OFFERING 80 HOURS OF POWER RESERVE. THE BROAD BEZEL IS IN CERAMOS, AN ALLOY OF 90% HIGH-TECH CERAMIC WITH 10% METAL ALLOY, WHICH COMBINES HARDNESS WITH LUSTRE. IIII - LONGINES LEGEND DIVER WATCH. THE LONGINES LEGEND DIVER WATCH STORY CONTINUES WITH COLOURFUL NEW MODELS, INCLUDING THIS VERSION WITH AN ASH GREY SHADED DIAL. HANDS, MARKERS AND ARABIC NUMERALS ARE LUMINESCENT FOR OPTIMUM VISIBILITY. THIS NEW MODEL IS FITTED WITH AN AUTOMATIC MOVEMENT INCORPORATING A SILICON BALANCE SPRING AND IS DELIVERED WITH A FIVE-YEAR WARRANTY.



When Hermès entered the fray of watchmakers jostling for space in the sport-luxe segment, it did so in characteristic style. The H08 introduced in 2021 marked the Parisian firm's first real incursion into the sports segment with a watch that had horological chic running through it. But would we have expected anything less? "Hermès is a house of creation founded on enduring values of quality and excellence," declared Guillaume de Seynes, Executive Vice President, at this year's Watches and Wonders Geneva fair. "As such, it is reaping the rewards of a long-term strategy." Translated into figures, this has meant "fantastic growth" in 2022 when for the first time revenue exceeded €10 billion, amounting to €11.6 billion (+23%). Progress has been even more "fantastic" in the watch segment, where sales gained 46% to surpass the €500 million mark.

The H08 certainly had a hand in these excellent results. Boasting a cushion-shaped case in ultra-light titanium or graphene-filled carbon composite, it combines robustness and elegance in a typically Hermès register. Released as a monochrome execution sporting a black ceramic bezel above a tone-on-tone dial, with displays of hours, minutes, seconds and date powered by the

HERMÉS HOS CHRONOGRAPH. THE SPORT-INFLECTED, URBAN-CHIC STYLE OF THE HERMÉS HOS CARRIES OVER TO A NEW CHRONOGRAPH VERSION THAT PLAYS ON CONTRASTING FINISHES AND TEXTURES. THE CUSHION-SHAPED CASE IS CUT FROM A BLOCK OF MULTI-LAYER CARBON FIBRE/GRAPHENE POWDER COMPOSITE THAT IS BOTH LIGHTWEIGHT AND STRONG. A WIDE TITANIUM BEZEL FRAMES THE BLACK DIAL WITH DISPLAYS FOR THE DATE IN A CUSHION-SHAPED WINDOW, A 30-MINUTE CHRONOGRAPH COUNTER AND RUNNING SECONDS. THE GRAINY FINISH OF THE SUBDIALS IS REPRISED ON THE HOUR TRACK, WITH SLIM ORANGE

automatic H1837 calibre, it was an instant hit. With this many aces up its sleeve, it was only a matter of time before the H08 spawned an entire collection, which Hermès presented at the Geneva fair.

### Beauty and emotion

"When I designed the H08, I looked for a certain balance in the geometry and colour," creative director Philippe Delhotal explained. "The idea was to create a desirable watch that combines beauty with emotion. When creating the H08 Chronograph, one of this year's new models, it was important that we retain that balance and aesthetic. For this reason, carrying on the spirit of the original model, we made a monopusher chronograph, with a composite of carbon fibre and graphene powder for the case. The H08 has the feel of a sports watch, hence it made perfect sense to introduce a chronograph." Providing contrast, a brushed and polished titanium bezel sits on top of the textured midcase. The monopusher for the chronograph is recessed into the black PVD-treated crown and highlighted with an orange ring. These pops of colour return on the chronograph hands and on the hour markers, and in full glory on the rubber strap

MARKERS DOUBLING UP THE NUMERALS. ORANGE ACCENTS ON THE HANDS AND A BAND OF ORANGE ON THE CROWN TIE THE DIFFERENT ELEMENTS TOGETHER AND MAKE THE VARIOUS INDICATIONS EASY TO READ. THE MOVEMENT IS THE IN-HOUSE AUTOMATIC H1837 WITH A DUBOIS DÉPRAZ CHRONOGRAPH MODULE. A SINGLE PUSHER STARTS, STOPS AND RESETS THE CHRONOGRAPH SECONDS HAND. THE RUBBER STRAP, ALSO IN ORANGE, HAS A WOVEN PATTERN ALONG ITS CENTRE, A NOD TO HERMÉS' SILK SCARVES.

with its textured weave pattern. Movement-wise, we have the same H1837 calibre augmented by a Dubois Dépraz module for the chronograph.

Never one to guit while it's ahead, at the same time as the H08 Chronograph, Hermès unveiled a series of H08, this time accented with bright hues. Orange, yellow, green and blue appear on the strap and add a hint of colour to the seconds hand, minutes track and crystal gasket. The familiar cushion-shaped case is fashioned from a block of composite, which Hermès describes as "both light and sturdy". The composite in question is made of braided and aluminised glass fibre blended with slate powder. According to the brand, "this natural pigment produces subtle silvery reflections against which the black ceramic bezel and crown stand out, creating a play on light and shade that highlights the depth of the concrete-coloured dial with its fine finish, punctuated by black hands and luminescent applied Arabic numerals." A mix of textures and minerality, deep shades and colourful accents, straight lines and curves, the H08 is a sports watch styled for everyday wear. All in all, a welcome addition to the Hermès stable. Christophe Roulet

HERMÈS HOB. THE CUSHION-SHAPED CASE OF THE NEW HOB IS MADE FROM A BLOCK OF COMPOSITE THAT MIXES BRAIDED AND ALUMINISED GLASS FIBRE WITH SLATE POWDER. THE RESULT IS A CASE THAT IS BOTH RESISTANT AND LIGHT ON THE WRIST, WHILE THE NATURAL PIGMENT GIVES A SUBTLE SILVER REFLECTION THAT MAKES THE BLACK OF THE CERAMIC BEZEL AND CROWN STAND OUT. MATCHING THE COLOUR OF THE RUBBER STRAP, POPS OF YELLOW, GREEN, BLUE OR ORANGE ON THE DIAL ENHANCE READABILITY. THE AUTOMATIC MOVEMENT IS THE IN-HOUSE HERMÉS H1837.

50 WATCH YOUR TIME MATERIALS

achieve uniform density of colour. This year Louis Vuitton is introducing the Tambour Moon Tourbillon Volant Poinçon de Genève with a case in vivid yellow or green sapphire. Hublot, one of the first brands to offer sapphire cases, is launching a Big Bang SAXEM, a high-tech alloy of aluminium oxide with rare earth elements, proposed in on-trend neon colours.

Transparent ceramic made an appearance on Cartier's ID Two concept watch, revealed in 2012. Now Ulysse Nardin is using it for the glass of its Diver Net, also a concept watch. This virtually inalterable material has practically the same properties as sapphire at a significantly lower production cost. As an alternative to sapphire, ceramic looks set for a bright future among consumers who want their watch to retain its fresh-out-of-the-box appearance... and therefore value. Ceramic is currently used to produce cases, crystals and bezel inserts, including, for the latter, bi-coloured ceramic. This chromatic development has also been seen on the case of certain Chanel J12 watches — most recently on the J12 Cybernetic whose case explores a pixelated design in a combination of black and white ceramic.

### Signature alloys

In a world that values uniqueness and differentiation, proprietary materials are a way of standing out from the crowd. Rolex understood this early on, becoming the first brand to switch from 316L to 904L stainless steel (in the mid-1980s). Rolex refers to the alloy, which is harder and more resistant to corrosion, as Oystersteel. The idea of using materials as a USP has made inroads within the industry. As a

brand attuned to issues surrounding the sourcing of precious stones and precious metals, Chopard has committed to using only ethical gold, part of its "journey to sustainable luxury". When it unveiled its Alpine Eagle collection in 2019, it also introduced the world to Lucent Steel™— a proprietary alloy that contains a high proportion of recycled metal. Hublot, meanwhile, has developed its own King Gold and Magic Gold alloys. Cases in 18k Magic Gold, a mix of gold with ceramic, are virtually impossible to scratch. Other brands have been even more radical in their approach. Panerai's Laboratorio di Idee has developed BMG-Tech™, a bulk metallic glass so hard that watches made from it are pretty much anything-proof. Other brands have focused on ceramised aluminium while Omega opts for Liquidmetal™, an amorphous metal alloy with high tensile strength. Developed by researchers at The California Institute of Technology, Omega uses it for certain components in its dive watches.

Which leaves carbon composites. Borrowed from Formula 1 and competitive sailing, carbon has become a sexy material in watchmaking, adopted and developed by prestigious names such as Richard Mille, Panerai and Audemars Piguet. But not only. As carbon enters the mainstream and appears on watches lower down the price scale, R&D departments are working on materials that are even more exclusive, a concept close to luxury's heart. For its H08, Hermès has developed a novel composite that combines slate powder with braided and aluminised glass fibre. The end result has an "organic" feel reminiscent of Tissot's RockWatch. Innovative, mechanical watchmaking is also an eternal recommencement.  $\checkmark$ 





I - ROLEX OYSTER PERPETUAL GMT-MASTER II. ROLEX

IN YELLOW ROLESOR, A COMBINATION OF OYSTERSTEEL

AND YELLOW GOLD, WITH A GREY AND BLACK MONOB-

LOC CERACHROM BEZEL INSERT. CALIBRE 3285 DRIVES

HOURS, MINUTES, SECONDS, DATE AND A SECOND TIME

I - IWC IWC PILOT'S WATCH CHRONOGRAPH 41 TOP

GUN OCEANA. IWC ADDS CERAMIC TO ITS LINE OF

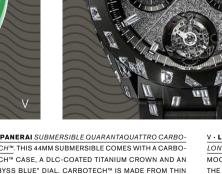
41MM PILOT'S WATCH CHRONOGRAPHS. THE BLUE

WITH PANTONE®, THE IWC-MANUFACTURED CALIBRE

69380 CHRONOGRAPH MOVEMENT IS KNOWN FOR ITS

ZONE WITH A 24-HOUR DISPLAY.

ROBUSTNESS AND RELIABILITY.



III-PANERAI SUBMERSIBLE QUARANTAQUATTRO CARBOTECH™ THIS 44MM SUBMERSIBLE COMES WITH A CARBOTECH™ CASE, A DLC-COATED TITANIUM CROWN AND AN
"ABYSS BLUE" DIAL. CARBOTECH™ IS MADE FROM THIN
SHEETS OF CARBON FIBRES WHICH ARE COMPRESSED AT
A CONTROLLED TEMPERATURE UNDER HIGH PRESSURE,
TOGETHER WITH A HIGH-END POLYMER THAT BINDS THE
COMPOSITE MATERIAL, MAKING IT EVEN STRONGER AND
MORE DURABLE.

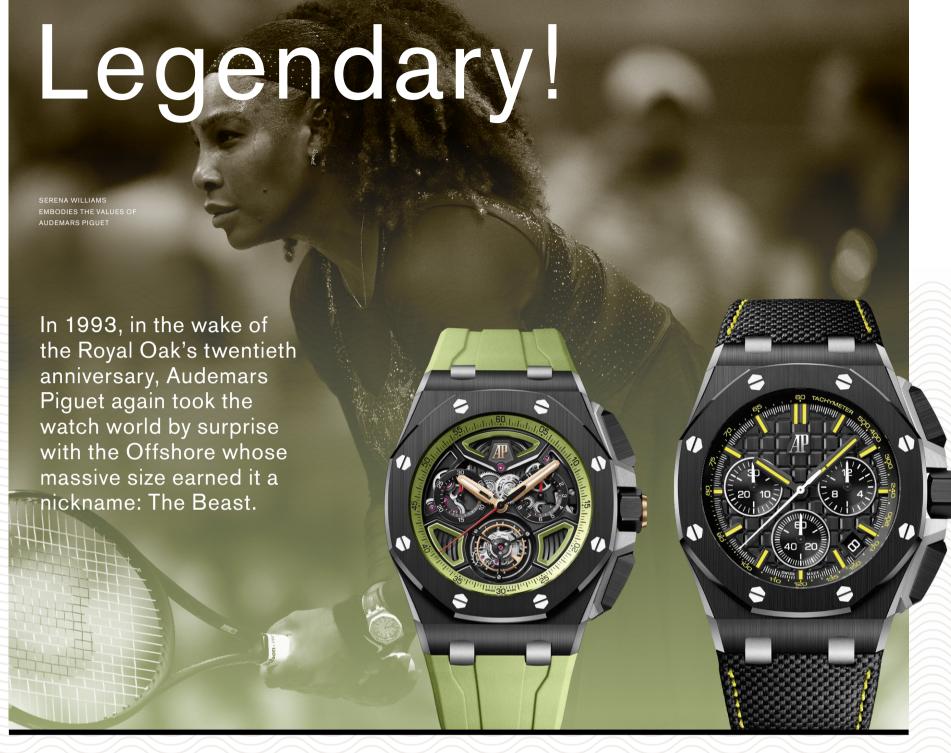
IIII - A. LANGE & SÖHNE ODYSSEUS TITANIUM. THE FIRST STEEL WATCH FROM A. LANGE & SÖHNE WHEN IT WAS INTRODUCED IN 2019, THE ODYSSEUS SPORTS WATCH NOW BECOMES THE BRAND'S FIRST WATCH IN TITANIUM. LIKE OTHER MEMBERS OF THE ODYSSEUS FAMILY, THIS NEW EDITION FEATURES A MULTI-LEVEL DIAL.

V - LOUIS VUITTON TAMBOUR MOON FLYING TOURBILLON POINÇON DE GENÈVE. THE CASE OF THIS TAMBOUR MOON IS CRAFTED FROM A BLOCK OF SAPPHIRE AND IS THE FIRST OF ITS KIND IN THE HISTORY OF WATCHMAKING TO BE HALLMARKED POINÇON DE GENÈVE. THIS COMPLETELY TRANSPARENT CREATION DISPLAYS IN MINUTE DETAIL EVERY PART OF ITS IN-HOUSE OPENWORKED MOVEMENT WITH A FLYING TOURBILLON.

VI - TAG HEUER CARRERA PLASMA DIAMANT D'AVANTGARDE CHRONOGRAPH TOURBILLON. IN 2022 TAG HEUER
PRESENTED A CHRONOGRAPH ENCRUSTED WITH LABGROWN DIAMONDS. IT RETURNS WITH THIS 44MM MODEL
WHOSE CASE, BEZEL AND BRACELET ARE MADE FROM
MATTE BLACK SANDBLASTED ANODIZED ALUMINIUM. ITS
SURFACE IS SET WITH LAB-GROWN DIAMONDS IN DIFFERENT SHAPES, FOR A TOTAL 7.1 CARATS.



VII - MONTBLANC 1858 ICED SEA AUTOMATIC DATE. THE "FROZEN" TEXTURE ON THE GREEN DIAL OF THIS ICED SEA AUTOMATIC DATE REPRODUCES THE FRAGMENTED NATURE OF GLACIAL ICE. HAND-EXECUTED USING AN ALMOST FORGOTTEN TECHNIQUE KNOWN AS GRATTÉ-BOISÉ, IT CREATES AN IMPRESSION OF DEPTH AND LUMINOSITY.



Some watches have no need for lengthy introductions, having imprinted themselves on the watch community's collective conscience. Audemars Piguet's Royal Oak Offshore is one of them. Massive, robust, resembling nothing else, it retains a personality and vitality as powerful as the day it was launched 30 years ago, in 1993

Like the Royal Oak before it, the Offshore came about in response to demand from a particular market. The year was 1989 and Audemars Piguet's German agent wanted a model inspired by offshore powerboat racing that would set a trend for the 1990s. This task fell on the young shoulders of designer Emmanuel Gueit, who was 22 years old. His mission was to rejuvenate the image of the Royal Oak, released in 1972. From his very first sketches, Gueit imagined the blueprint for the future Offshore: a huge (for that time) diameter of 42mm and 14mm high, a thick gasket, a crown coated with coloured rubber and rounded bracelet links. All that was missing was a chronograph (which would come later). But when the watch world discovered this behemoth, "the scandal it provoked was equal to its size," comments Raphaël Balestra, Audemars Piguet Heritage and Archives Manager. The Offshore's proportions weren't the only bone of

AUDEMARS PIGUET ROYAL OAK OFFSHORE SELFWINDING FLYING TOURBILLON CHRONOGRAPH. THIS NEW BLACK CERAMIC ITERATION OF THE ROYAL OAK OFFSHORE SELFWINDING FLYING TOURBILLON CHRONOGRAPH HIGHLIGHTS THE WATCH'S ARCHITECTURAL MICRO-MECHANICS WITH GREEN ACCENTS. MOUNTED ON A GREEN RUBBER STRAP, THIS SPORTY TIMEPIECE COMBINES INTRICATE HANDCRAFTSMANSHIP WITH CUTTING-EDGE TECHNOLOGY. WITH THIS NEW 100-PIECE LIMITED EDITION, AUDEMARS PIGUET'S MASTERY OF MATERIALS AND

contention. It was also criticised for its price, retailing at twice that of a steel Royal Oak. Nicknamed "The Beast" (hardly the most flattering of sobriquets), it even had its detractors within the Manufacture, but as Audemars Piguet likes to remind us, rules are meant to be broken. In 1991 the then co-CEO Steve Urquhart greenlighted the model, fully aware of the production difficulties that would have to be resolved in order to give this extraordinary watch its characteristics, such as the bracelet whose curved links had to be hand-brushed, and water-resistance that had been increased to 100 metres.

### Birth of an icon

Overcoming these difficulties meant the Royal Oak Offshore launched a few months later than planned, but it was worth the wait. Despite the hostile reaction from the industry, it found fans among a young clientele, especially in Italy, who fell in love with this modern luxury watch and its unapologetic design. Still, it would be a few years before this enthusiasm translated into sales, helped by variations that introduced different sizes as well as complications — including a chronograph that makes a perfect fit for the Offshore's sporting personality. A further boost came from the celebrities who accompanied the collection's development. First

COLOURS TAKES ANOTHER STEP FORWARD ON THE OCCASION OF THE COLLECTION'S 30TH ANNIVERSARY. INTRODUCED IN 2021, CALIBRE 2967 IS AN AUTOMATIC FLYBACK CHRONOGRAPH MOVEMENT WITH 526 COMPONENTS. A SINGLE BRIDGE SUPPORTS THE CAGE OF THE FLYING TOURBILLON AS IT ROTATES, VISIBLE AT 6 O'CLOCK. THIS NEW EDITION BENEFITS FROM THE INTERCHANGEABLE STRAP SYSTEM, DIRECTLY INTEGRATED INTO THE CASE STUDS AND BUCKLE, THAT WAS DEVELOPED FOR THE LATEST ROYAL OAK OFFSHORE MODELS.

among them was Arnold Schwarzenegger. The actor and later California governor collaborated on multiple limited editions to raise money for charitable organisations, including the Inner City Games Foundation which provides sports and academic activities for disadvantaged youth. More high-profile endorsements would follow, including with NBA star player LeBron James and hip-hop artist Jay-Z.

"The collaboration with Arnold Schwarzenegger on the Royal Oak Offshore End Of Days, for the release of the film of the same name, brought the collection to the attention of a wider audience," recalls Audemars Piguet CEO François-Henry Bennahmias. By the early 2000s the Royal Oak Offshore had truly taken off. It was the sport-luxe watch everyone wanted, provided they had the wrist to wear its 220 grams and almost double that for the yellow gold versions. While never departing from its original codes, the Royal Oak Offshore has seen 230 variations ranging from 27mm to 48mm in diameter. Materials have run the gamut from steel to titanium, ceramic, rubber, Kevlar, cermet and forged carbon. As for functions, the chronograph has been joined by perpetual calendars, tourbillons and other complications. More than a watch, the Royal Oak Offshore is a statement! Eric Dumatin

AUDEMARS PIGUET ROYAL OAK OFFSHORE SELFWINDING CHRONOGRAPH 43 MM.
AUDEMARS PIGUET PRESENTS THE ROYAL OAK OFFSHORE SELFWINDING CHRONOGRAPH IN BLACK CERAMIC, CREATED AS A TRIBUTE TO THE "END OF DAYS" MODEL
THAT WAS RELEASED IN 1999 IN COLLABORATION WITH ARNOLD SCHWARZENEGGER, THE FIRST OF NUMEROUS CELEBRITY COLLABORATIONS. CELEBRATING
A WATCH THAT HAS BEEN PUSHING THE LIMITS FOR 30 YEARS, THIS 500-PIECE
LIMITED EDITION SPORTS A BLACK AESTHETIC WITH YELLOW DETAILING.



# A thing of beauty

-o Paloma Recio, director, R&E magazine

The artist by his work is known.

Jean de La Fontaine (1621 — 1695)

Beyond the intricacy of mechanisms, a watch derives its beauty from the decorative arts that transform cases and dials.

In the introduction to his lectures on Aesthetics, Hegel writes that the aim of art is to "awaken and vivify our slumbering feelings, inclinations and passions of every kind." We could say the same of beauty, a quality that captures and awakens our senses. In watchmaking, beyond the technique and complexity of mechanisms, pure beauty exists and is expressed through the decorative arts.

These métiers d'art, as they are also known, have been the companions of Swiss watchmaking from its very beginnings. They have the noble mission to embellish timepieces, in many instances transforming them into diminutive works of art for the wrist, made possible only by the dexterity and creativity of highly skilled artisans. The passing of time becomes almost secondary, allowing enamelling, miniature painting, engraving, gem-setting, guillochage, marquetry and filigree to take pride of place. Displays of hours, minutes and seconds are transformed; the watch becomes an object of beauty that encompasses an array of disciplines and requires the work of expert hands, years of experience, infinite patience and no small amount of imagination.



BVLGARI SERPENTI TUBOGAS INFINITY. TWO BVLGARI ICONS — THE SNAKE-INSPIRED TUBOGAS FROM 1948 AND THE SERPENTI — COME TOGETHER IN THE PRECIOUS, INFINITELY CREATIVE SKIN OF THE SERPENTI TUBOGAS INFINITY. THIS IS THE FIRST TIME THE SERPENTINE SILHOUETTE CONTINUES FROM THE CASE ALL THE WAY TO THE BRACELET, THANKS TO THE REFINED GEM-SETTING ON AN UNPRECEDENTED MODULAR CONSTRUCTION. THE RINGS ARE MOULDED, POLISHED, SET WITH DIAMONDS THEN ASSEMBLED ON A TITANIUM BLADE. THE HEAD OF THE SNAKE IS SNOW-SET WITH DIAMONDS ON THE DIAL. MORE DIAMONDS ADORN THE BEZEL AND A FURTHER EIGHT DIAMONDS HIGHLIGHT THE CURVE OF THE CASE.

### The art of fire

The most prestigious watch manufacturers have brought these skills in-house and employ their own specialists who have mastered the secrets of a particular technique, passed through generations. These studios may, on occasion, collaborate with experts outside the department, many of whom have acquired unparalleled expertise in their field. Enamel artist Anita Porchet immediately springs to mind. As one of the foremost modern practitioners of enamel miniature painting, her services are requested by the most prestigious and storied Haute Horlogerie makers.



### **Diving belles**

Ever since the 1950s and the launch of the Fifty Fathoms — the first modern dive watch — the ocean has been at the heart of Blancpain in every sense. As well as nurturing a passion for the sea and actively advocating for ocean preservation through its Ocean Commitment programme, the brand has made "underwater watches" a mainstay of its collections, to an extent that the Blancpain name has become a reference for the diving community. The very first Fifty Fathoms was released in 1953 and named for its water-resistance of fifty fathoms (300 feet/91.5 metres). Originally developed for French Navy combat divers then adopted by marine special forces in other countries, the Fifty Fathoms was later released as civilian versions whose popularity among recreational divers and the general public continues unabated. Three years later, in 1956, Blancpain introduced the Bathyscaphe. Slightly more compact and streamlined than its predecessor, for everyday wear, it would be no less capable of deep dives. Both ranges would be given a full revamp, in 2007 for the Fifty Fathoms then 2013 for the Bathyscaphe.

While every inch a sports watch, and with no doubt as to its diving credentials, the Bathyscaphe Quantième Complet reinforces the principle of everyday utility that underpinned the first Bathyscaphe. Proposed in red gold or titanium, its complete calendar shows the date by hand, with days and months in apertures. These three indications are complemented by moon phases at 6 o'clock. Blancpain has taken care to protect the 6654.P automatic movement (72 hours of power reserve) by equipping its date mechanism with a security system that enables the watch's owner to set the date at any time without risk to the movement.



IN DIAMETER AND WATER-RESISTANT TO 300 METRES, THE BATHYSCAPHE QUANTIÈME ONE IN RED GOLD AND ONE IN GRADE 23 TITANIUM, THE RED GOLD MODEL IS PAIRED WITH A SUNBURST GRADIENT BLUE DIAL THAT CATCHES THE LIGHT WITH REMARKABLE EASE. GOLD HOUR MARKERS, HANDS AND MOON MATCH THE CASE COLOUR. THE DIAL INLAY FEATURING A CERAGOLD™ TIME SCALE. THE COLOUR/MATERIAL MATCH CONTIN UES ON THE BACK WHICH REVEALS A RED GOLD OSCILLATING WEIGHT. IT IS FITTED WITH A BLUE NATO OR SAILCLOTH STRAP, WITH THE LATTER OPTION OFFERING THE CHOICE BETWEEN A PIN BUCKLE AND A FOLDING CLASP.

One of Ms Porchet's most recent productions, in collaboration with engraver Dick Steenman, is for the Tambour Opera Automata by Louis Vuitton. Inspired by Bian Lian, a dramatic art associated with Sichuan Opera, the mask she has created in white, red and black cloisonné enamel with gold wire changes expression on demand. Next to it is a fan, a fundamental accessory for performers, in champlevé enamel. This motif is repeated on the crown. The enamelwork for the dial and crown represents seven days of painstaking work. Master engraver Dick Steenman spent a further two weeks sculpting the elements in gold, including the dragon that wraps around the mask.

### An artistic vision of time

Art, history and culture are the building blocks for the artisans at Vacheron Constantin, where time has always been viewed through an artistic lens. One piece in particular warrants mention. Crafted as a unique piece, Les Cabinotiers Tribute to Johannes Vermeer offers a vibrant demonstration of the mechanical arts, by incorporating a Westminster

grande sonnerie and a tourbillon regulator, as well as the decorative arts in the engraving and sculpting techniques illustrated on the case, bow and flanks of this pocket watch. On the back cover. the miniature reproduction in enamel of Vermeer's celebrated Girl with a Pearl Earring, also the work of Anita Porchet, achieves a degree of perfection commensurate with the watch itself.

Another timepiece deserving of work-of-art status is the RM 47 Tourbillon: Richard Mille's homage to Japanese samurai culture and the values of bushido, their code of conduct. Each watch in this 75-piece limited series took 16 hours to engrave and nine hours to paint, entirely by hand, to create the samurai armour in yellow gold. Eleven sculpted, engraved and partially painted elements frame the tourbillon, whose compact size leaves more space free for the miniature armour and swords. Connoisseurs will notice the crest of the Asano, a clan of legendary warriors. They will appreciate the beauty of the traditional kabuto helmet with its ribbon and observe how the two swords in their sheaths are positioned blade upwards, ready for combat.









HAPPY DIAMONDS WATCH HAS TRANSFORMED ITSELF MANY TIMES SINCE ITS DEBUT IN 1993 REVEALED AT THE SAME TIME AS THE BE HAPPY CAMPAIGN STARRING JULIA ROBERTS, THIS DIMIN-UTIVE, QUARTZ-POWERED VERSION INTRODUCES

II · AUDEMARS PIGUET ROYAL OAK SELFWIND-NG CHRONOGRAPH 38 MM AUDEMARS PIGUET HAS INTRODUCED TWO NEW EXECUTIONS OF ITS ROYAL OAK SELFWINDING CHRONOGRAPH 38 MM, INCLUDING THIS MODEL IN 18K ROSE GOLD WITH BAGUETTE DIAMONDS ON THE BEZEL. A BLACK ONYX DIAL MAKES A PERFECT BACKDROP FOR DIAMOND HOUR MARKERS AND FOR THE GOLD RINGS AROUND THE CHRONOGRAPH COUNTERS III · BAIGNOIRE DE CARTIER WATCH. THERE HAVE BEEN MULTIPLE INCARNATIONS OF THE BAIGNOIRE WATCH SINCE ITS FIRST APPEARANCE IN 1912. THIS YEAR SEES A CHANGE OF SCALE, WITH SMALLER PROPORTIONS. THE DIAL, WITH ROMAN NUMERALS, IS CROWNED WITH THE FULLNESS OF THE BEZEL WHILE THE CURVED OVAL DIAL EXTENDS INTO A BANGLE, TO BE SLIPPED ONTO THE WRIST AND WORN BOTH AS A WATCH AND AS JEWELLERY.

IIII · MONTBLANC BOHÈME DAY & NIGHT 30 MM THIS NEW DIAL DEPICTS A FAIRYTALE SCENE OF FLUFFY MOTHER-OF-PEARL CLOUDS AND A DAY. NIGHT DISC WHOSE GRADIENTS OF BLUE SKY ARE ENHANCED WITH RAYS OF LIGHT, AS THE SUN RISES, THE MOON SETS AND VICE VERSA. BUT AT MIDNIGHT, IN DEFIANCE OF THE LAWS OF NATURE, SUN AND MOON MEET.



It's a fact: Richard Mille leaves no-one indifferent. Since its inaugural watch in 2001, the RM 001 Tourbillon, the brand has done things its own way, determined to shake up the aesthetics and thinking behind contemporary watchmaking. It arrived with watches that were intrinsically different and, from the outset, positioned at the highest point of the pyramid. It also had the means to keep them there, whether technical, with cutting-edge mechanisms and innovative materials, or commercial, with a "family" approach to business. Wearing a Richard Mille became a grail for anyone wanting to enter a world where time is measured to uncompromising standards of performance, in powerful designs and with an attitude that can only exist on solid foundations. From success to success, in just twenty years Richard Mille has joined the ranks of the most prestigious watchmakers in the world, with a catanary than the last.

A single example suffices: that of the RM UP-01 Ferrari. Leaving aside the details of how this remarkable watch is constructed, its dimensions alone are compelling. Here is a watch with a total thickness of 1.75 mm that houses a mechanical movement that is 1.18 mm high and weighs 2.82 grams. The result of more than 6,000 hours of development and laboratory testing, including pendulum impact testing, this titanium watch is the thinnest ever

RICHARD MILLE CALIBRE CRMT7 IN THE RM 88 SMILEY. THE ULTIMATE FEEL-GOOD WATCH, RICHARD MILLE'S RM 88 SMILEY IS A MASTERPIECE OF WATCH-MAKING MECHANICS AND MINIATURE SCULPTURE. THE IN-HOUSE TOURBILLON SKELETON CRMT7 CALIBRE DRIVES HOURS, MINUTES AND A FUNCTION INDICA-TOR, WITH AUTOMATIC WINDING BY A 3N YELLOW GOLD ROTOR IN THE SHAPE OF A SUN. THE SKELETONISED PLATE AND BRIDGES ARE MADE FROM GRADE 5 TITANIUM WITH GOLD PVD TREATMENT. PRODUCTION OF THE RM 88 AUTOMATIC TOURBILLON SMILEY IS LIMITED TO 50 PIECES.

made, offers 45 hours of power reserve and can withstand accelerations of 5,000 g. Limited to 150 pieces, don't expect to see the RM UP-01 Ferrari "parked" in the display cases of one of the 39 Richard Mille stores worldwide, at least not for more than a few seconds...

### Extreme solutions

It is what Richard Mille is about: taking watchmaking to the extreme, and then some. It's a favourite saying of Mr. Richard Mille — co-founder with Dominique Guenat, an old friend — that despite its young age, the brand has far more technical experience than anyone else. Such extreme solutions in terms of movements and materials, served by a razor-sharp aesthetic, have driven the brand's success and delivered multiple patented firsts such as the declutching rotor, the G-sensor and the tilting pinion, a new type of coupling system for logue of more than 130 models, each more extraordia a flyback chronograph. As for innovations, alongside function selectors, vibrating alarms and time-zone setting by the bezel, it would be impossible to omit the alloys and composites that enable the outstanding performance, resistance, durability and lightness of a Richard Mille watch. One example says it all: the RM 27-04 Rafael Nadal. The titanium tourbillon movement is suspended by cables inside the case in TitaCarb®, a polyamide reinforced with carbon fibre that is one of the strongest composites in the world, having a fracture resistance close to that of steel.

> RICHARD MILLE RM 07-01 INTERGALACTIC. FOUR NEW MODELS JOIN RICHARD MILLE'S 07-01 COLLECTION OF WOMEN'S WATCHES, EACH REPRESENTING AN EXPLO-SION OF STARS IN THE DARKNESS OF NIGHT, CRAFTED FROM BLACK CARBON TPT®. THEY INTRODUCE A NEW GEM-SETTING TECHNIQUE IN WHICH RED GOLD PRONGS SECURE THE DIAMONDS BUT ALSO PLAY A DECORATIVE ROLE. WHEREAS GOLD IS MALLEABLE, THE HARDNESS OF CARBON TPT® REQUIRES THE MULTIPLE SETTINGS, OF DIFFERENT DIAMETERS, TO BE PREPARED WITH A DIAMOND-BIT MILLING TOOL BEFORE EACH OF THE 51 DIAMONDS AND 765 PRONGS CAN BE INSERTED BY HAND

All this in a featherlight package: the entire watch, strap included, barely tips the scales at 30 grams.

Richard Mille brands its watches as "a racing machine on the wrist" and makes no secret of its affinity with high-powered automotive engines, from Formula 1 to classic cars, as well as with sailing. This dual passion inspired the brand to establish the Richard Mille Racing Team which from 2020 to 2022 competed in the World Endurance Championship (WEC) with an all-female then mixed-gender crew, and in 2023 to found the Richard Mille Cup, a regatta for pre-1939 yachts. By extension, sport has become a favourite territory for the brand whose "family" of athletes continues to grow. And because at Richard Mille there is no standing still, its watches are designed with and for the members of this family. They are instruments built for competition, made to survive the toughest treatment. Even the tourbillon models must endure conditions this mechanism's inventor would never have dared to imagine.

But for Richard Mille, nothing is impossible, including conquering the hearts of women watch enthusiasts. Its first in-house automatic movement and automatic tourbillon were both launched in ladies' collections, not forgetting gem-set and métiers d'art watches, and the brand's first women's sports watch, the RM 07-04, that was released this year. Christophe Roulet

RICHARD MILLE RM 07-04 AUTOMATIC SPORT. RICHARD MILLE DEVELOPED THE 07-04, ITS FIRST SPORTS WATCH FOR WOMEN, WITH INPUT FROM SIX FEMALE ATHLETES, ALL MEMBERS OF ITS EXTENDED "FAMILY", THREE YEARS OF R&D WENT INTO THIS WATCH, PROPOSED AS SIX MODELS IN CARBON TPT® OR QUARTZ TPT®, IN ORDER TO DEVELOP A COMPACT AND SKELETONISED AUTOMATIC MOVEMENT, GUARANTEE HIGH SHOCK-RESISTANCE AND PERFECTLY INTEGRATE THE EXTE-RIOR INTO THE MOVEMENT



These past years have been something of a golden era for the decorative arts in fine watchmaking, from traditional techniques that have been reimagined in line with current tastes to others that had almost disappeared and have been brought back to life. They are as essential as the artisans who practice these crafts with seemingly infinite imagination. Jaeger-LeCoultre has designed its Métiers Rares Atelier as a place where these skilled craftsmen and women can apply these decorative techniques side by side, to deliver a "renewed message of beauty in a contemporary language."

### **Ancient techniques**

A companion to watchmaking since the seventeenth century, enamel is the triumph of colour over time. It is also a delicate technique that requires vast artistic intuition and talent, in addition to patience and precision (which is perhaps why most enamellers are women). Depending on the degree of detail and complexity of the piece, an enamelled dial can be fired several dozen times at 800°C. Gem-setting is another sought-after technique for the decoration of cases and dials, as is guillochage or engine-

turning. Abraham-Louis Breguet was first to use guillochage on a watch, in the 1780s, sensing that it would give a distinctive beauty to his dials. Still today, a guilloché dial is a signature of a Breguet watch. Performed on a rose engine lathe, guillochage demands that artisan and machine work as one, modulating speed of rotation and pressure to create depth and play of light. Patterns are many and varied, and carry evocative names such as Clous de Paris, barleycorn, chequerboard, basketweave and sunburst. Such a wealth of decorations gives an engine-turned dial its unique personality.

Other lesser-known techniques produce equally splendid results. Shakudo is one. This ancient Japanese art, once used by samurais to adorn every part of their cataphract, is now practiced in Switzerland's Vallée de Joux. A watch dial is dipped into a bath of rokusho, an alloy of copper and gold, as many time as required to achieve the desired nuances of black, grey and blue. A shakudo dial is usually further embellished with an engraved motif. Damascene is another, spreading from Damascus (whence it takes its name) to Japan and Spain









I-JAEGER-LECOULTRE RENDEZ-VOUS DAZZLING
STAR. JAEGER-LECOULTRE INVENTS AN ENTIRELY
NEW COMPLICATION IN THE FORM OF A SHOOTING STAR, CUT IN A SPINNING AVENTURINE DISC,
WHICH APPEARS AT RANDOM MOMENTS, FOUR TO
SIXTIMES AN HOUR, ON THE BLUE AVENTURINE DIAL.
ACTIVATED BY THE MOVEMENT OF THE WRIST, THIS
COMPLICATION CAN ALSO BE ENJOYED ON DEMAND.
II-HERMÉS ARCEAU GRAND CARROSSE ROYAL.
HERMÉS HAS CAPTURED THE MADCAP JOURNEY
OF THE "GRAND ROYAL COACH" ON A MOTHER-OF
PEARL DIAL INSIDE A 41MM CASE IN WHITE GOLD.
EACH DETAIL IS HAND-DRAWN IN NUANCES OF

BLUE AND GREY ENAMEL. DEPTH AND SHADOW
ARE CREATED THROUGH TWENTY-SOME LAYERS
OF COLOUR, EACH OF WHICH MUST BE FIRED
BEFORE THE NEXT CAN BE APPLIED.

III. LOUIS VIJITON TAMBOUR FIFRY HEART

BEFORE THE NEXT CAN BE APPLIED.

III · LOUIS VUITTON TAMBOUR FIERY HEART
AUTOMATA. LOUIS VUITTON DEMONSTRATES
ITS VIRTUOSO SKILL AS A MAKER OF AUTOMATA WATCHES WITH THIS DECIDEDLY FEMININE
MODEL, WHICH IS FITTED WITH THE BRAND'S FIRST
IN-HOUSE AUTOMATA MOVEMENT WITH AUTOMATIC WINDING. THE RICH REDS AND GREENS,
AND SUBTLE TEXTURES OF ITS GRAND FEU ENAMEL
DIAL OFFER A DAZZLING SPECTACLE.

IIII · CHANEL MADEMOISELLE PRIVÉ PIQUEAIGUILLES LACE MOTIF. IN THE ATELIERS ON
RUE CAMBON, GABRIELLE CHANEL WAS NEVER
WITHOUT A PAIR OF SCISSORS AROUND HER
NECK AND A PINCUSHION STRAPPED TO HATCH
WHOSE LARGE (55MM) DIAMETER OFFERS SCOPE
FOR FIVE TABLEAUX, INCLUDING THIS CAMELLIA-STREWN LACE MOTIF.



Observers will tell you there is a before and an after Abraham-Louis Breguet, a watchmaker whose genius shaped the measurement of time more than any other. Agree or not, there is no denying that the inventor of the tourbillon, who was born in the Swiss canton of Neuchâtel in 1747, moving to Quai de l'Horloge in Paris in 1775, was one of the Enlightenment's most remarkable and creative horologists. During his lifetime, this novel thinker won the favours of every European court. Speaking recently about his plans for the brand, which he has helmed since 2021, Chief Executive Lionel a Marca made no secret of his admiration: "I want this extraordinary watchmaker's story to become more widely known. He invented everything from the tourbil-Ion to crowdfunding, through his subscription watches. His registers, which are conserved at the Breguet Museum on Place Vendôme in Paris, are a prototype customer database. He was one of the first to open trading posts, in the eighteenth century, being present in France, Russia and Spain. He was also a fabulous designer, the creator of a subtle and refined aesthetic."

A paragon of horological virtues, such a figure is a rare exemplar... although one must have the right cards in hand to be worthy of such a model. Which in the case of Breguet the brand, leaves no doubt. Now part of the Swatch Group, Breguet is experiencing a new golden age. In the brand's words, "in 1999, Nicolas G.

BREGUET CLASSIQUE CALENDRIER 7337. THIS NEW RENDITION OF THE CLASSIQUE CALENDRIER, WITH INDICATIONS OF THE DAY, DATE, MOON PHASES AND SMALL SECONDS IN A 39MM GOLD CASE, IS CONTEMPORARY WITHOUT STRAYING FROM ITS ORIGINS. THE OFF-CENTRE HOURS AND MINUTES DISPLAY IS DECORATED WITH A CLOUS DE PARIS HOBNAIL GUILLOCHÉ WHILE THE OUTER DIAL USES A CIRCULAR BARLEYCORN MOTIF. AT NOON, MOON PHASES ARE REPRESENTED BY A HAMMERED GOLD MOON ON A GUITTERING BUILE LACQUER BACKGROUND.

Hayek took over one of the most precious names in fine watchmaking which was lying somewhat dormant at the time. Driven by a genuine passion, he infused peerless vitality into a brand endowed with an exceptional heritage and know-how." With the Swatch Group's industrial capacity and commercial clout behind it, Breguet would have at its disposal the material and technical resources it needed to perpetuate the art of fine watchmaking. The brand was given a prestigious manufacture (Lémania) and benefited from substantial and regular investment, much of it in research and development. It would, for example, be one of the first to introduce high-frequency movements and a pioneer of silicon technology.

### On a contemporary note

Breguet continues to nurture its founder's innovative spirit while epitomising the precision and perfection for which he was renowned. With what type of timepiece? "Future products will reprise the hallmarks of the brand in a contemporary style," Lionel a Marca declared. "Where complications are concerned, the range includes ultra-thin watches, minute repeaters and tourbillons. Our role is to make watches featuring innovative complications that remain easy to use for the wearer." Illustrating this are two original models in the Classique collection. One is a revisited interpretation of the Calendrier 7337. Its dial is decorated with guillo-

BREGUET CALIBRE 502.3.P. THE CLASSIQUE PERPETUAL CALENDAR IS FITTED WITH THE 502.3.P CALIBRE (CALIBRE 502 WITH AN ADDITIONAL CALENDAR MODULE). ONE OF THE THINNEST BREGUET MOVEMENTS, IT HAS BEEN ENGINEERED TO PROVIDE A HIGH LEVEL OF PERFORMANCE DESPITE A HEIGHT OF JUST 4.5 MILLIMETRES. AN OPEN BARREL CONTRIBUTES TO THIS SLENDERNESS WHILE PROVIDING CONSTANT ENERGY THROUGHOUT THE 45 HOURS OF POWER RESERVE. THE GOLD ROTOR IS OFF-CENTRED TO PROVIDE MAXIMUM SPACE FOR THE 294 COMPONENTS.

chage, a distinctive feature of a Breguet watch, with a Clous de Paris or hobnail pattern on the off-centre hours and minutes dial, matched with a circular barleycorn motif for the surrounding dial. Moon phases, represented by a hand-hammered moon in gold on a spangled blue lacquer sky, take pride of place at 12 o'clock, framed by apertures for the date and day. A 39mm case in white gold or rose gold contains calibre 502, one of the thinnest movements from Breguet, measuring 2.4mm high and incorporating a silicon balance spring.

All the ingredients of this new "magic formula" - one of the thinnest movements available on the market, innovative silicon technology, the original layout of indications, the superbly executed guillochage and the natural elegance that comes from a watch crafted in the grand tradition — can be seen both in this Calendrier 7337 and in the Quantième Perpétuel 7327. Its slim silhouette houses the same calibre 502, with the addition of a perpetual calendar module for a total height of 4.5mm, again one of the brand's thinnest movements. "Simple to wear but complex in its creation", it tracks the quirks of the Gregorian calendar with a fresh, contemporary arrangement of the different indications that is easy to read. Functioning without adjustment until 2100, the perpetual calendar is one of the most prestigious complications, from one of the most pres-Christophe Roulet

BREQUET CLASSIQUE QUANTIÈME PERPÉTUEL 7327. ABRAHAM-LOUIS BREQUET ENJOYED GREAT SUCCESS WITH HIS PERPÉTUELLE WATCHES. HE EQUIPPED THEM WITH AN À SECOUSSES OSCILLATING WEIGHT THAT USED THE WEARER'S BODY MOVEMENTS TO AUTOMATICALLY WIND THE MECHANISM. HE ALSO CHOSE THESE MODELS, WHICH OFTEN INCORPORATED A CALENDAR MECHANISM, TO EXPERIMENT WITH HIS FIRST GUILLOCHÉ SILVERED DIALS. IN 2023 BREQUET REVISITS THE PERPETUAL CALENDAR, IN GOLD, AS PART OF THE CLASSIQUE COLLECTION.



Grand Seiko's Heritage collection celebrates the earliest Grand Seiko timepieces, which it reinterprets with the very latest movements, manufacturing techniques and craftsmanship. It embodies the uniquely Japanese Grand Seiko aesthetic and the excellence for which the brand has always been renowned. This year, Grand Seiko is celebrating the 25th anniversary of its 9S movement. This in-house calibre, which made its debut in 1998, is the symbol of Grand Seiko's tireless pursuit of absolute precision. Indeed, the first 9S calibres were so advanced, they enabled the creation of a new Grand Seiko Standard that was much higher than the industry norm. Not that the Japanese firm is the kind to rest on its laurels. Over the past 25 years, Calibre 9S has given rise to an entire series of movements offering different functions and harnessing the properties of new alloys for the balance spring and mainspring, while MEMS (Micro-Electro-Mechanical Systems) technology is used to manufacture parts to a tolerance of one thousandth of

Calibre 9S thus became the foundation on which Grand Seiko mechanical movements are built, including the 9SA5: a new-generation movement fitted with a dual impulse escapement. For this anniversary year, the brand has released two models with the same case design and 37mm diameter as the 1998 model that housed the original 9S movement. One has a silvery-white dial whose colour and texture are inspired by nature, a recurring theme at Grand Seiko. Specifically, this commemorative watch recalls the sea of clouds that form a blanket over Mount lwate in lwate Prefecture, where all Grand Seiko mechanical watches are made. This scene is only visible at daybreak, when the air is so still and humid that dense clouds overlap to create a beautiful silvery-white sea. C.R.



GRAND SEIKO CALIBER 9S 25TH ANNIVERSARY LIMITED EDITION. THIS 1,200-PIECE LIMITED EDITION WATCH IS EQUIPPED WITH THE HI-BEAT 36000 AUTOMATIC MECHANICAL CALIBER 9S85, WHICH IS HAND-ASSEMBLED BY THE CRAFTSMEN AND WOMEN AT THE GRAND SEIKO STUDIO SHIZUKUISHI. IT IS ACCURATE TO 3/+5 SECONDS A DAY AND PROVIDES 55 HOURS OF POWER RESERVE. THE GRAND SEIKO EMBLEM IS CLEARLY VISIBLE THROUGH THE TRANSPARENT SAPPHIRE BACK, SET INTO THE TITANIUM OSCILLATING WEIGHT WHOSE COLOUR, CREATED ESPECIALLY FOR THIS WATCH, SUGGESTS THE DEEP-BLUE SKY ABOVE THE SEA OF CLOUDS THAT SO OFTEN SURROUND MOUNT INVATE'S SUMMIT

(Toledo remains an important centre for damascene). A metal surface is finely etched to form the outline of the design. Gold or silver threads are then inlaid into these indentations after which the surface is polished smooth, ready to stand the test of time.

Also from Japan, urushi lacquer has been used by Chopard for the dials of some of its most exceptional timepieces, including those in celebration of the Lunar New Year. The dials for this Year of the Rabbit, for example, are the work of world-renowned urushi master Minori Koizumi, who spent 160 hours crafting each one.

### Renaissance and haute couture

From East to West and Renaissance Italy, where Bylgari found inspiration for its Diva's Dream Peacock Dischi. The peacock feather marquetry on the dial returns to a technique that flourished in Italy during this period. The first stage is to sort through some 500 feathers, examining each one to select those with the best colour and texture. The chosen feathers are pressed in an antique brass steamer to bring

out their full beauty. They are then trimmed, glued and assembled into the mosaic-like pattern, with no two dials the same.

Haute couture inspired Dior for its Grand Bal watches. Prominent on the dial side, the oscillating weight of the Inverse Caliber is bedecked with feathers, fragments of butterfly or scarab wings, or a kaleidoscope of precious stones to suggest the swirling of an haute couture ball gown. Part of Dior's Grand Soir collection, the white gold dial of the Grand Soir Libellule is awash with diamonds in a snow setting. Resting on it is a dragonfly in yellow gold, set with emeralds, sapphires and amethysts. Its wings are adorned with mother-of-pearl and coloured feathers. Chanel is another watchmaker to explore themes borrowed from haute couture, or inspired by Coco Chanel herself. The Mademoiselle Privé Coromandel collection borrows elements from the folding screens that decorated the legendary couturier's apartments, transposed in miniature to dials in delicately sculpted and carved gold or mother-of-pearl. ~









I - FREDERIQUE CONSTANT HIGHLIFE LADIES
AUTOMATIC SPARKLING. THE SKY-BLUE DIAL
OF THIS VERSION OF FREDERIQUE CONSTANT'S
HIGHLIFE LADIES AUTOMATIC SPARKLING HAS
BEEN DIPPED IN STARDUST AND FRAMED WITH
DIAMONDS. TIME IS MEASURED ON DIAMOND
HOUR MARKERS, ENCASED IN A 34MM DIAMETER.
II - GRAND SEIKO MASTERPIECE COLLECTION
HAND-ENGRAVED MANUAL-WINDING SPRING
DRIVE LE. THE MANUAL-WINDING MOVEMENT
IN THIS NEW MASTERPIECE SPRING DRIVE WAS
CRAFTED AT GRAND SEIKO'S MICRO ARTIST
STUDIO AND RESIDES IN A HAND-FNGRAVED CASE.

INDIVIDUALLY CRAFTED, THIS LIMITED EDITION IS
INSPIRED BY WHITE BIRCH FORESTS AND MEETS
THE HIGH STANDARDS EXPECTED OF GRAND
SEIKO'S MASTERPIECE WATCHES.

SEIKO'S MASTERPIECE WATCHES.

III · RADO TRUE THINLINE. RADO'S MASTERY OF
MATERIALS COMES TO THE FORE IN ITS TRUE THINLINE NATURE COLLECTION, WHICH USES HIGHTECH CERAMIC IN A RANGE OF NATURE-INSPIRED
COLOURS. AN ULTRA-SLIM, LIGHTWEIGHT PROFILE
ENSURES COMFORT ON THE WRIST.

IIII · LONGINES LA GRANDE CLASSIQUE MONO-CHROMATIC, LONGINES INTRODUCES COLOURFUL INTERPRETATIONS OF ONE OF ITS MOST BELOVED COLLECTIONS, THE APTLY-NAMED LA GRANDE CLASSIQUE. A DISCREET 29MM DIAMETER WILL STILL BE NOTICED FOR THE VIBRANT SHADE OF ITS LACQUERED AND POLISHED DIAL, AND FOR THE 44 TOP WESSELTON DIAMONDS ON THE BEZEL.



Founded on the banks of the Tiber almost a century and a half ago, Bylgari is as Roman as the Colosseum itself. Its creativity is a celebration of the Eternal City, its lifestyle and treasures. An exuberance at odds with Switzerland and its rigorous efficiency? Far from it. Bylgari's watches have gained presence and substance without ever departing from their Roman origins. They are a Latin declension of watchmaking grammar, which is a feat in itself.

The acquisition, in 2000, of the Roth and Genta manufactories in Le Sentier, Switzerland, has certainly contributed to this, although the Roman firm had already expanded into watchmaking. The first documented timepiece by Bylgari is a jewellery watch made in 1918. Then came a future icon, the Serpenti Tubogas, introduced in 1948 and which this year celebrates its 75th anniversary. The Bylgari Bylgari, launched in 1975, was the first model not to be lavished with gems. The catalogue was extended in 1998 with the release of the Bylgari Aluminium. However, Bylgari's watchmaking would really take off in the 2000s, as the takeover of Roth and Genta coincided with a policy of vertical integration. The brand had grand designs for its watch business and wanted to be certain it possessed the industrial independence needed to bring these ideas to fruition. In the scope of some ten years, Bylgari grew into a full-fledged Manufacture. It now employs 400 people

BYLGARI OCTO ROMA PRECIOUS NATURALIA. THE OCTO ROMA'S GENER-OUS FORMS CAN HOUSE ANY NUMBER OF COMPLICATIONS, WHICH MAKES IT THE IDEAL SHOWCASE FOR BYLGARI'S EXPERTISE AS A MAKER OF COMPLEX MECHANISMS, DEMONSTRATED HERE BY A FLYING TOURBILLON. THIS OCTO ROMA PRECIOUS NATURALIA LIVES UP TO ITS VOCATION — TO REMIND US OF ALL THAT IS PRECIOUS IN THE NATURAL WORLD — WITH EQUAL PARTS OF AESTHETIC BEAUTY AND MECHANICAL EXCELLENCE. THE VISIBLE PLATE SHOWS

across its three sites in Neuchâtel, which is responsible for after-sales servicing and casing-up, Saignelégier in the Jura for dial and case production, and Le Sentier in Vallée de Joux where the brand's movements and ultrahigh-end timepieces are made.

### Music to the ears

Bylgari continues to deliver the proof of the expertise at work across all its sites and particularly the workshops in Le Sentier, where a glass-fronted production facility now adjoins the original building. For anyone whose memory of all things horological stretches back more than two decades, the names Daniel Roth and Gérald Genta conjure up, respectively, a master of mechanical movements and the inspired designer of some of the twentieth century's most recognisable watches... including the Bylgari Bylgari. The Italian firm cultivates this fabulous heritage with an inimitable Roman touch, exemplified by such memorable collections as the Octo Roma and the Octo Finissimo. A visit to Le Sentier brings it all to life. It's here that some one hundred people work on the brand's most complex pieces, not least the movements that have earned Bylgari eight world records for thinness: movements such as Calibre BVL 100, a diminutive round movement measuring 12.3 mm in diameter and 2.5 mm high, or Calibre BVL 150, the smallest tourbillon movement on the market. Not forgetting the

OFF THE WARM AMBER AND CHESTNUT SHADES OF TIGER'S EYE. SLIVERS OF THIS GEMSTONE, TENTHS OF A MILLIMETRE THICK, ARE SET ON EACH OF THE 12 INDICES: A TASK THAT REQUIRES REMARKABLE MANUAL DEXTERITY. EACH FRAGMENT OF THIS STONE HAS UNIQUE PROPERTIES, HENCE EACH WATCH IS EQUALLY UNIQUE. IT FORMS A RICH BACKDROP FOR THE IN-HOUSE SKELETONISED MOVEMENT AND THE GEARS THAT CASCADE TOWARDS THE FLYING TOURBILLON AT 6 O'CLOCK.

intricate chiming mechanisms that sound the time on two, three, even four gongs in the case of the Grande Sonnerie Perpetual Calendar. Composed of more than 1,200 components, this remarkable watch is a compendium of the brand's capabilities in ultra-complicated timepieces.

Everything is done here in Vallée de Joux, at the heart of the grand Swiss watchmaking tradition. Components are made to micrometric tolerances using automatic lathes, CNC machines and wire erosion, before being decorated and assembled to plans drawn up by the engineering studio, which is responsible for all research and development. Naturally, these few lines cannot do justice to these multiple tasks, which must be seen to be appreciated. Watchmaking is a world of the infinitely small and its codes are a closed book to whomever hasn't witnessed first-hand the assembly and finishing of a watch movement: a masterpiece of mechanical engineering. But not only. A detour via the workshop where Bylgari's chiming watches are crafted leaves no doubt as to the musical competencies they require. Each one is the work of a single watchmaker who not only assembles and adjusts the movement, but also fine-tunes the chiming mechanism for purity, pitch and tone. The most complex will spend six months in his or her care. Then again, Rome wasn't built in a day. Christophe Roulet

BVLGARI SERPENTI 75TH ANNIVERSARY. SINCE THE VERY FIRST SERPENTI TUBOGAS JEWELLERY WATCHES IN 1948, THE SERPENTI HAS TAKEN ENDLESS FORMS. EMBRACED BY WOMEN AS A SYMBOL OF EMPOWERMENT, THROUGHOUT ITS 75 YEARS THIS EVER-EVOLVING MOTIF HAS RETURNED IN MULTIPLE ITERATIONS AND CONFIRMS ITS ENDURING ATTRACTION WITH EACH NEW APPEARANCE.



# The silicon revolution

**J**ames Gurney

Art is an additional emotion applied to skillful technique.

Charlie Chaplin (1889 - 1977)

Between the Apple Watch, which uses seven nanometre chips, and an Omega Speedmaster based on seventeenth-century designs, there is no comparison. And yet, the competition between the two could well be a silicon story.

Precision is much less talked about by watch brands than it was even 20 years ago, a function of watchmaking's final transition from supplier of practical necessity to pillar of the luxury industry — few brands now bother to pretend that tourbillons offer anything more than added aesthetic value. It's ironic then that the underlying technology has improved over this time at a rate comparable to the eight-eenth-century race to produce a marine chronometer good enough for navigation. So, how good are contemporary watches? Precision and reliability are surprisingly tricky ideas to measure in practice and bench-tests on timing machines are limited in what they can tell you about how a watch will perform over time and 'in the wild'. Nevertheless, the headline figures tell a compelling story: the standard that COSC requires for a movement to be awarded a chronometer rating is -4/+6 seconds per day with an average variation of two seconds per day over the testing period.

MONTBLANC 1858 THE UNVEILED SECRET MINERYA MONOPUSHER CHRONOGRAPH. WHAT LOOKS LIKE AN "ORDINARY" SKELETONISED CHRONOGRAPH WITH AN OPEN DIAL IS MORE COMPLEX THAN IT APPEARS AT FIRST GLANCE. IT DOES HAVE AN OPEN DIAL BUT THE MOVEMENT HAS BEEN FLIPPED, HENCE THE "UNVEILED SECRET". THE DIRECTION OF THE HANDS ALSO HAD TO BE REVERSED, WHICH REQUIRED AN ADDITIONAL 21 COMPONENTS. EVEN THE LAST DIGIT OF THE REFERENCE NUMBER FOR THE CALIBRE HAS BEEN INVERTED, FROM THE MB 16-29 OF THE HISTORIC MINERVA MONOPUSHER CHRONOGRAPH BASE CALIBRE TO THE MB 16-26. PREVIOUSLY, THE WATCH'S WEARER WOULD HAVE ADMIRED THE CHRONOGRAPH IN ACTION THROUGH A SAPPHIRE BACK; NOW THAT THE MECHANISM IS ON FULL VIEW, MONTBLANC HAS FITTED A SOLID CASEBACK WITH AN ENGRAVED IMAGE OF



### **New directions**

Carl F. Bucherer has released a capsule collection that celebrates the 135th anniversary of the independent brand, established since 1888 in Lucerne, Switzerland, and the start of a new era. In its words, "the launch of the Capsule Collection is not only a special edition to mark this anniversary; it also represents a departure from every other product presentation in the brand's long history and clearly signals a focus on new horizons. The five watches — all of which reimagine bestsellers from the brand's portfolio — make a powerful statement." Admired for its independence, technical innovation and original aesthetics, the brand intends to engage a contemporary clientele with products that show a more distinctive design. Among the new releases are the brand's patented peripheral tourbillon, a perpetual calendar and a day-big date. All three are produced as limited editions in forged carbon. Joining them are two unlimited chronographs in black DLC-coated steel. One features a flyback function and the other is a bi-compax with the addition of an annual calendar.

"Our positioning allows us to meet the needs and desires of the modern consumer around the world," says Samir Merdanovic, Chief Technology Officer at Carl F. Bucherer. "Rather than launch timepieces for either men or women in a specific age bracket, we decided to go on offering watches that capture the mood of contemporary generations and reflect their appreciation of cool design, innovative mastery and excellent craftsmanship." The five watches were launched on the same day, one every two hours in five cosmopolitan cities that have played an important role for the firm during the past 135 years. As befits a truly global brand.



CARL F. BUCHERER HERITAGE BICOMPAX ANNUAL BLACK & MANERO PERIPHERAL PERPETUAL CALENDAR BLACK. THE MANERO PERIPHERAL PERPETUAL CALENDAR BLACK FEATURES A FORGED CARBON CASE WITH A TITANIUM CONTAINER. THE IN-HOUSE CFB A2055 CALIBRE POWERS MOON PHASES, SHOWN ON AN AVENTURINE DISC WITH TWO HAND-ENGRAVED MOONS IN WHITE GOLD, AND A PERPETUAL CALENDAR THAT KEEPS TRACK OF EVERY DAY WITH NO CORRECTION REQUIRED UNTIL 2100. LIMITED TO 88 PIECES, IT IS CHRONOMETER-RATED BY THE CONTRÔLE OFFICIEL SUISSE DES CHRONOMÉTRES (COSC). THE HERITAGE BICOMPAX ANNUAL BLACK IS CASED IN DLC-COATED STEEL WITH A MATTE BLACK LACQUERED SURFACE. THE DIAL DISPLAYS AN ANNUAL BLACK LACROPERS. THE CFB 1972 CALIBRE DRIVES AN ANNUAL BLACK LACROPERS. THE CFB 1972 CALIBRE DRIVES AN ANNUAL CALENDAR FUNCTION THAT REQUIRES JUST ONE DATE ADJUSTMENT PER YEAR.

### Advances in performance

That standard has been in place since 1973 and was set to a level of precision which better than average, but otherwise ordinary, series-production quality watches could achieve. In comparison, Omega's new Spirate balance, the latest in a series of enhancements to movement architecture from the Biel brand, has allowed Omega to claim a certified precision of 0/+2 seconds per day for the new Speedmaster Super Racing. Rolex claims -2/+2 for the vast majority of its production and in both cases, the standard is applied to complete watches rather than movements on their own. Those numbers make impressive reading, but of more use to the average watch buyer is the extension to guarantee and warranty periods over the last decade, with both Omega and Rolex increasing the service interval recommendation to five years. These are watches that keep better time for longer under tougher conditions.

It's not just in the basics of reliability that new technology has improved things, as the fast-beat watches from Chopard, Seiko, TAG Heuer and Zenith or the

ultra-slim watches from Bvlgari, Piaget and Richard Mille demonstrate; the last decade in particular has seen significant advances in performance. There have been watches that are as slim as Bvlgari's Octo Finissimo series or the RM UP-01 (Vacheron made a 0.94mm movement in 1931) and there have been plenty of fast-beat watches — Zenith's 5Hz-running El Primero movement is pushing 55 years, not twenty. The difference is that better fabrication techniques and finer control of the materials means the current crop can be expected to perform with near enough the same level of reliability and endurance as normal production watches.

### Silicon wonders

Everyone knows that silicon has been the watch industry's wonder material (though there's plenty who decry its brittleness as a fundamental, even fatal flaw). However, the really interesting story of the past two decades is not the material or even the basic production techniques for making silicon components; it's the way watchmakers and production engineers have adapted silicon to their needs and let what they learn adapt their ideas and









I-BREQUET TRADITION QUANTIÈME RÉTROGRADE
7597. THE TRADITION COLLECTION TAKES ITS
INSPIRATION FROM THE CALIBRE OF ONE OF
THE MOST SIGNIFICANT PIECES OF BREGUET'S
HISTORY: THE SUBSCRIPTION WATCH. THE 40MM
WHITE GOLD CASE OF THIS RETROGRADE DATE
MODEL CONTAINS THE 505Q AUTOMATIC MOVEMENT INCORPORATING A REVERSE IN-LINE LEVER
ESCAPEMENT WITH SILICON HORNS, AS WELL AS
A BREGUET BALANCE SPRING ALSO IN SILICON.
II-AUDEMARS PIGUET CODE 11.59 STARWHEEL.
AUDEMARS PIGUET INTRODUCES ITS WANDERING
HOURS MOVEMENT (A COMPLICATION INVENTED IN
THE SEVENTEENTH CENTURY) TO THE CODE 11.59

COLLECTION. HOURS ARE SHOWN BY MEANS OF THREE ROTATING DISCS ON A CENTRAL ROTOR. THE CURRENT HOUR POINTS TO THE MINUTES ON A 120-DEGREE ARC. THIS STARWHEEL IS CASED IN WHITE GOLD WITH BLACK CERAMIC FOR THE CASEBAND AND CROWN.

CASEBAND AND CROWN.

III - RICHARD MILLE RM 66 FLYING TOURBILLON.
ONCE AGAIN RICHARD MILLE DISREGARDS CONVENTION WITH THE RM 66. IN ITS CENTRE, AN
X-RAYED HAND MAKES THE "HORNS" SIGN. ITS
OUTSTRETCHED INDEX AND PINKY FINGERS
ENSNARE THE MOVEMENT. VISIBLE ON THE BACK,
THELAST PHALANGE OF THE THUMB HOLDS DOWN
THE MIDDLE AND RING FINGERS.

IIII · CHOPARD ALPINE EAGLE CADENCE 8HF.
THE CHRONOMETER-CERTIFIED CHOPARD 01.12-C
MOVEMENT INSIDE THIS ALPINE EAGLE'S 41MM
TITANIUM CASE RUNS AT 57,600 VIBRATIONS/HOUR
OR 8 HZ. CHOPARD SUSTAINS THIS HIGH FREQUENCY BY USING MONOCRYSTALLINE SILICON,
A LIGHT, SELF-LUBRICATING MATERIAL, FOR THE
PALLET LEVER, ESCAPE WHEEL AND IMPULSE PIN.



It's becoming a habit! Each crop of new watches from Grand Seiko brings its share of stand-out pieces. Already last year, the Japanese watchmaker impressed with the Kodo Constant-Force Tourbillon. The brand's first mechanical complication, it took home the Chronometry Prize at the Grand Prix d'Horlogerie de Genève 2022. This year, speaking at the Watches and Wonders Geneva fair, Akio Naito, President of Seiko Watch Corp., took visible pride in unveiling another remarkable mechanical watch, which he described as "possibly more important even than the Kodo and perfectly aligned with our collections which, since 1960, have been entirely dedicated to precision timekeeping." The good people at Grand Seiko have named this latest creation with an acronym: one that neatly describes the characteristics of a watch that runs at 10 beats per second ("Ten"), delivers three days of power reserve ("t" for three), has automatic winding ("a") and incorporates a chronograph ("graph"). Thus Akio Naito lifted the veil on the Tentagraph: Grand Seiko's first mechanical chronograph.

To say that a chronograph is more important than a watch that combines a tourbillon and a constant-force mechanism as one unit on a single axis — an unprecedented achievement — could seem slightly presumptuous at first. On reflection, the remark seems justified. The Kodo exists as a limited edition of 20 watches,

GRAND SEIKO EVOLUTION 9 COLLECTION TENTAGRAPH SLGCOO1. ALL GRAND SEIKO MECHANICAL MOVEMENTS ARE TESTED OVER 17 DAYS IN SIX POSITIONS AND AT THREE TEMPERATURES. THE TENTAGRAPH UNDERGOES AN ADDITIONAL THREE DAYS OF TESTING IN ORDER TO MEASURES ITS PRECISION WITH THE CHRONOGRAPH RUNNING. CONSEQUENTLY, EVERY TENTAGRAPH MOVEMENT IS TESTED ACROSS 20 DAYS TO ENSURE A MEAN DAILY RATE OF -3 TO +5 SECONDS. THE DIAL FEATURES GRAND SEIKO'S SIGNATURE MT. IWATE PATTERN, INSPIRED

each assembled and adjusted by hand. Of course, the care afforded to such a small and mechanically complex series cannot reasonably be compared to that given to a watch intended for large-scale production. The Tentagraph, however, is at the forefront of Grand Seiko's collections, and as such is also assembled and adjusted by hand as part of a scenario that leaves no room for error. This means problems are ironed out upstream, anticipated as of the design stage and resolved, where necessary, at the prototype stage so that the assembly process becomes as "smooth" as possible. All in a day's work for Grand Seiko, a fully integrated manufacturer and heir to a legacy that stretches back 110 years, to 1913, when the Laurel became the first Japanese-made wristwatch.

### Precision and reliability

Whereas the Laurel was created from the ground up, the watchmakers behind the Tentagraph had an important asset at their disposal: Caliber 9SA5. Introduced in 2020, this next-generation high-beat movement is probably one of the best series-produced calibres available. It is the basis for the Tentagraph's 9SC5 chronograph calibre, which possesses the same inherent qualities of precision, autonomy and reliability. Precision thanks to the ten beats per second required to measure tenths of a second. Autonomy in

BY THE RIDGED CONTOURS OF THE MOUNTAIN BEYOND THE WINDOWS OF THE GRAND SEIKO STUDIO SHIZUKUISHI WHERE THE TENTAGRAPH AND THE OTHER GRAND SEIKO MECHANICAL WATCHES ARE ASSEMBLED AND ADJUSTED. THE MT. IWATE PATTERN FIRST APPEARED IN 2006 AND HAS BECOME SYNONYMOUS WITH GRAND SEIKO MECHANICAL WATCHES. THIS MAJESTIC SUMMIT CONTINUES TO INSPIRE GRAND SEIKO AND IS BOTH A SYMBOLIC AND A FITTING CHOICE FOR THE BRAND'S FIRST MECHANICAL CHRONOGRAPH.

the three days of power reserve (including when the chronograph is running) from the two series-coupled barrels — a duration that is unequalled in the industry today. This leaves the reliability of a movement whose mean daily rate of between +5 and -3 seconds outperforms the standard required for official Swiss chronometer rating. As a guarantee, Grand Seiko subjects its Tentagraph movement to a stringent testing procedure over 20 days.

Without going into the movement's specifications in detail, we can note that the chronograph uses a vertical clutch transmission, which eliminates chronograph hand recoil, and is controlled by a column wheel. These two specificities are completed by Grand Seiko's Dual-Impulse Escapement which delivers mainspring power more efficiently to the balance in this high-beat movement, directly by the escape wheel and indirectly by the pallet fork. Finishing is of an equally high standard, both on the movement and on the titanium case and bracelet which benefit from Grand Seiko's own Zaratsu polishing. As for the rich blue dial, it features the Mt. Iwate pattern, inspired by the ridged contours of the mountain beyond the windows of the Grand Seiko Studio Shizukuishi, where the Tentagraph and all other Grand Seiko mechanical watches are assembled and adjusted. So that we never forget the "nature" of time Christophe Roulet

GRAND SEIKO SPORT COLLECTION SPRING DRIVE GMT. THE SHINSHU WATCH STUDIO, HOME TO ALL GRAND SEIKO SPRING DRIVE PRODUCTION, LOOKS OUT ACROSS THE HOTAKA MOUNTAINS, WHICH INSPIRED THIS 44MM STEEL WATCH, THE LATEST SPRING DRIVE GMT IN THE SPORT COLLECTION. THE DYNAMIC GREEN DIAL FEATURES LARGE INDICES AND HANDS WHICH ARE COATED WITH LUMIBRITE, GRAND SEIKO'S LUMINOUS PAINT. A 24-HOUR CHAPTER RING FRAMES THE DIAL AND CAN BE USED WITH THE GMT HAND AND THE 24-HOUR BEZEL TRACK TO FOLLOW A TOTAL OF THREE TIME ZONES. WATER-RESISTANCE IS 200 METRES.

FOCUS WATCH YOUR TIME 65



### **Unique Freak**

When Ulysse Nardin's Freak was presented to the world in 2001, it was like a slap in the face. Without refuting the fundamentals of time measurement, it proved that it was possible to think watch mechanics differently. To think "freakishly", meaning to transcend horological stereotypes and tropes. "Today there is no watch that is a greater symbol of the modern rulebreakers' individualism and their courage to never compromise than Ulysse Nardin's Freak," says CEO Patrick Pruniaux. For many observers, watchmaking's contemporary history can be divided into two periods: before the Freak and after. Presumptuous? Perhaps, but the fact remains that the Freak shattered every rule of traditional watchmaking in terms of design, mechanisms and materials.

First mechanisms. The Freak was the first ever watch whose movement rotates to tell the time. The barrel is configured to complete a full rotation every 12 hours and therefore does double duty as the hour indicator. It drives the bridge carrying the gear train around the perimeter of the case once every hour. This is the famous orbital flying carrousel that replaces the minute hand and brings us to the Freak's "second first". There are no hands. Or crown or dial. The movement, a kinetic sculpture, "speaks" for itself. Which leaves the revolutionary materials. Ulysse Nardin was the first watchmaker to incorporate silicon into its movements; the condition for the Freak to even exist. From its very first appearance, the Freak was a laboratory for horological research with each successive execution ushering in fresh innovations. The Freak One is a celebration of this two-decade history and a truly iconoclastic watch.



ULYSSE NARDIN FREAK ONE. A WATCH WITH NO HANDS, NO DIAL AND NO CROWN, WHERE THE ORBITAL FLYING CARROUSEL MOVEMENT IS KING, THE FREAK ONE BUILDS ON THE DECADES OF RESEARCH THAT HAVE GONE INTO THIS EXTRAORDINARY WATCH. THE UN-240 IN-HOUSE CALIBRE IS EQUIPPED WITH THE GRINDER AUTOMATIC WINDING SYSTEM WHOSE FOUR BLADES CONNECT TO THE OSCILLATING WEIGHT TO SUPPLY 72 HOURS OF POWER RESERVE. THIS NEW MOVEMENT ALSO INCORPORATES AN OVERSIZED, AERODYNAMIC BALANCE MADE FROM A SINGLE PIECE OF SILICON, CONNECTED TO A LEVER ESCAPEMENT IN DIAMONSIL (DIAMOND-COATED SILICON). IT IS THE MOST ADVANCED OSCILLATOR YET. THE FREAK ONE MEASURES 44MM AND IS OFFERED IN BLACK DIC TITANIUM WITH A ROSE GOLD BEZEL. ON A RECYCLED RUBBER STRAP

thinking — not forgetting that the industry has had to prove silicon can work to the same levels of dependability as 'legacy' materials.

Ulysse Nardin's Freak of 2001, the first watch to include silicon components, showed that silicon could be used, not should be used, although the way it was deployed served as a preview for what the industry could achieve. The novel carousel movement developed by Carole Forestier and adapted by Ludwig Oeschlin required lighter than usual materials for the dual escape wheels at its heart. Aluminium was initially tried but wore out too quickly. The alternative solution was silicon, and the parts were designed and produced in time for the 2001 Baselworld trade fair (and what remains one of the more remarkable product launches in watchmaking history, featuring the brand's CEO in the grotesque papier mâché mask of a Fassnacht drummer). Once the excitement of the launch and the ingenious carrousel movement and novel escapement had died down, it was quickly clear that there was something remarkable about the silicon balance wheels — not only were they light and durable, the diagrams and renders released by

Ulysse Nardin showed that additive manufacturing gave movement designers an entirely new set of tools.

### An ongoing revolution

This was a revolution that's still playing out twenty-plus years later, with entire academic fields emerging to research the implications and possibilities (and not just in Switzerland). Three broad categories of change can be identified: material, geometry and conceptual. Silicon might be a wonder material but on its own it has significant drawbacks, principally that it is comparatively brittle compared to traditional materials. This being an industry that expects components to last for decades in use, that would have been a fatal flaw, save that DRIE and LIGA fabrication techniques are well suited to combining silicon with other materials such as oxygen, nickel-phosphorous and carbon, either as distinct layers or as reactive agents to alter the mechanical characteristics of the material.

One of the early adopters of silicon, Patek Phillipe, along with Rolex and the Swatch Group, used a similar technique to create Silinvar®. This









I • OMEGA SPEEDMASTER SUPER RACING. THIS

44MM STEEL WATCH ACHIEVES PRECISION OF 0/+2
SECONDS A DAY THANKS TO OMEGA'S SPIRATE™
SYSTEM WITH ITS SI14 BALANCE SPRING. USING
AN ECCENTRIC ADJUSTMENT MECHANISM ON
THE BALANCE BRIDGE, THE WATCHMAKER FINETUNES THE SPRING FOR PRECISION BY ADJUSTING THE STIFFNESS OF ITS ATTACHMENT POINT.
II • TUDOR BLACK BAY 54. THE BLACK BAY 54
RETAINS THE CLASSIC 37MM PROPORTIONS OF
TUDOR'S VERY FIRST DIVE WATCH BUT WITH AN
INCREASED DEPTH RATING OF 200 METRES AND,
INSIDE, THE COSC-CERTIFIED MT5400 IN-HOUSE

CALIBRE. A VARIABLE INERTIA BALANCE WHEEL COUPLED WITH A NON-MAGNETIC SILICON BALANCE SPRING MAINTAIN PRECISION OF -2/+4 SECONDS A DAY. POWER RESERVE IS 70 HOURS. III-GRAND SEIKO ELEGANCE COLLECTION HI BEAT GMT SBGJ271. THIS GMT WATCH, IN A 39.5MM TITA-IIIUM CASE, EVOKES SNOW-COVERED FORESTS. ITS HI-BEAT GMT 9586 MOVEMENT RUNS AT 5 HZ. IT INCLUDES COMPONENTS MANUFACTURED USING MEMS (MICRO ELECTRO MECHANICAL SYSTEM) TECHNOLOGY, IN ADDITION TO A MAINSPRING AND BALANCE SPRING IN EXCLUSIVE SPRON ALLOYS. POWER RESERVE IS 55 HOURS.

IIII · HERMÈS ARCEAU LE TEMPS VOYAGEUR 38.

TIME TRAVELS, LITERALLY, AROUND THE DIAL OF
THIS ARCEAU WATCH, ON A SATELLITE DISPLAY OF
HOURS AND MINUTES. HOME TIME IS SHOWN IN
AN APERTURE AT 12 O'CLOCK WHILE LOCAL TIME
IS SET BY PRESSING A PUSHER THAT ADVANCES
THE SUBDIAL, ALIGNING IT WITH ONE OF THE
24 CITIES REPRESENTING THE 24 TIME ZONES.



When it comes to heritage, facts are more eloquent than words. The horological history books contain the names of workshops and manufacturers that made a lasting impression on an era with their innovation and pioneering mindset. Some continue to bring a unique dimension to this industrial activity. Longines is one of them. The notion of heritage has particular significance for the company, which was founded in 1832. Its museum, which is housed at the Longines head-quarters in Saint-Imier, Switzerland, conserves thousands of artefacts, from historic watches to navigating instruments and archive documents, including every production register since the brand was established—something no other maker has. Behind every contemporary Longines watch lies a century and a half of history.

Longines has shown itself to be more than worthy of such a legacy. Interviewed in February this year, Matthias Breschan, CEO since 2020, told Belgian daily *Le Soir* "we will continue to build on our DNA of heritage, tradition and elegance, but these will evolve." Vintage watches have exploded in popularity, with interest strongest in models that are inspired by the past but can also demonstrate a genuine connection to the brand and its history. This puts Longines in a strong position, as the author of numerous technological breakthroughs such as high-frequency mechanisms, thanks to which it was already timing sporting events

LONGINES SPIRIT FLYBACK. THE LONGINES SPIRIT COLLECTION WELCOMES A CHRONOGRAPH WITH FLYBACK FUNCTION. IT HOUSES A NEW AND EXCLUSIVE MOVEMENT WITH AN ANTI-MAGNETIC SILICON BALANCE SPRING. CHRONOMETER-CERTIFIED BY THE COSC, THIS HIGHLY PRECISE MOVEMENT OFFERS A POWER RESERVE OF 68 HOURS. A TRANSPARENT CASE BACK REVEALS THE FINE DETAILS OF THE CALIBRE, INCLUDING A PERSONALISED OSCILLATING WEIGHT ENGRAVED WITH THE LONGINES SPIRIT GLOBE SYMBOL AND THE LONGINES FLYBACK NAME. THIS

to one tenth of a second in 1914 and one hundredth of a second by 1916. "We will be developing a series of exclusive in-house movements inspired by this little-known heritage," continued Matthias Breschan. "The Longines Spirit Zulu Time that we launched in 2022 is equipped with a high-end GMT calibre that benefits from the latest movement technology. It's a way for us to tell people that Longines is the inventor of the first dual time-zone movement, in 1925, inside the first GMT wristwatch."

### Modern technology

Fans didn't have to wait long for the sequel. Also part of the Longines Spirit collection that debuted in 2020, this year's release is a flyback chronograph that channels the conquering spirit of aviation's pioneers. Like the dual-time function, Longines was an "early adopter" of the flyback function, which stops, resets and starts the chronograph hand without pausing the mechanism and with a single press on a pusher (as opposed to the three separate actions required with a standard chronograph). This complication is an intrinsic part of the brand's rich heritage, says Longines, which made is first flyback movement in 1925. A patent was filed in 1935 and registered the following year. A practical tool for pilots who needed to make rapid navigation calculations while in flight, the flyback quickly became an essential cockpit instrument. Richard Byrd

NEW MODEL STANDS OUT FOR ITS REFINED AESTHETICS AND METICULOUS SATIN, MATTE, POLISHED AND ENGRAVED FINISHES. IT FEATURES A BIDIRECTIONAL BEZEL WITH LUMINESCENT MARKERS ON THE BLACK CERAMIC INSERT, SURROUNDING A BLACK OR BLUE SUNRAY DIAL. THE 42MM STEEL CASE IS WORN ON AN INTEGRATED STEEL BRACELET, BROWN LEATHER STRAP OR NATO-STYLE FABRIC STRAP, WHICH ARE ALL INTERCHANGEABLE. THE LEATHER STRAP FASTENS WITH A FOLDING CLASP WHOSE MICRO-ADJUSTMENT SYSTEM GUARANTEES A PERFECT FIT.

was one of the many intrepid aviators to put his trust in Longines. In 1929 the U.S. Naval officer became the first person to fly over the South Pole: a solar compass and a Longines watch guided him throughout the perilous nineteen-hour journey. Byrd undertook three more expeditions to the Antarctic, including one in 1939 during which he wore a Longines 13ZN wristwatch with a flyback function.

This historical pedigree isn't the only thing the Longines Spirit Flyback has going for it: it also makes use of the latest technological developments in a proprietary movement that Longines developed with ETA, its sister company within Swatch Group. Housed inside the watch's 42mm stainless steel case, Calibre L791.4 drives small seconds and a 30-minute subdial. A silicon balance spring provides anti-magnetic capabilities while power reserve extends to a comfortable 68 hours. Beating at a rate of 28,800 vibrations/hour and measuring eighths of a second, the Longines Spirit Flyback has passed Contrôle Officiel Suisse des Chronomètres (COSC) tests for superior precision. A bidirectional rotating bezel with a ceramic insert along with Super-LumiNova treatment for the hands and for the dial and bezel markers add to the practical functionality of this robust watch, as do a water-resistance rating of 100 metres and quick-change straps. The ideal instrument for modern-day explorers. Christophe Roulet

LONGINES FLYBACK CHRONOGRAPH (1936). THIS IS THE FIRST SERIES-PRODUCED CHRONOGRAPH WITH A FLYBACK FUNCTION, DRIVEN BY THE 13ZN CALIBRE: ONE OF THE MOST TECHNICALLY ADVANCED MOVEMENTS OF ITS DAY. LONGINES FILED A PATENT FOR THE FLYBACK FUNCTION IN 1935, AWARDED IN 1936. THE BRAND CONTINUED TO PRODUCE FLYBACK CHRONOGRAPHS INTO THE 1970S, WHEN IT WAS TAKEN OVER BY THE FUTURE SWATCH GROUP.

FOCUS WATCH YOUR TIME 67



### Dive time

This latest Black Bay is the third evolution of a model introduced in 2012. The main upgrade is that it is now certified by METAS, the Swiss federal institute of metrology. METAS Master Chronometer certification is one of the toughest and most comprehensive as it covers the main functional characteristics of a watch: precision, resistance to magnetic fields, water-resistance and power reserve. METAS standards are exceptionally high, starting with precision. For a watch to qualify, it must vary by no more than five seconds a day (0/+5); this is five seconds less than the standard required by the Contrôle Officiel Suisse des Chronomètres (COSC). This Black Bay is the third Tudor watch to satisfy METAS criteria, a prelude to the brand's plans for all its ranges to obtain METAS certification, which implies making a substantial number of changes to the existing in-house movements.

Consequently, the in-house MT5602-U calibre inside this Black Bay has been adjusted to comply with METAS requirements. Displaying hours, minutes and seconds, with a power reserve up to 70 hours, it is designed for robustness and precision thanks to a variable inertia balance that is maintained by a sturdy traversing bridge with a two-point fixation, combined with an anti-magnetic silicon balance spring. Testing is not just on the movement but the fully assembled watch. Cased in steel with a 41mm diameter and a unidirectional bezel, this Black Bay is worn on a satin-finish triple-link steel bracelet or a steel bracelet with five brushed and polished oval links. Both these bracelets, as well as the black rubber strap, are fitted with Tudor's T-fit clasp for rapid adjustment The dial is inspired by mid-century Tudor dive watches, giving a pleasantly retro feel to this future-proofed watch.



TUDOR BLACK BAY. THE ORIGINAL BLACK BAY DEBUTED IN 2012 WITH A BURGUNDY BEZEL. IT RETURNED IN 2016 EQUIPPED WITH AN IN-HOUSE MOVEMENT. THIS THIRD EVOLUTION POINTS TO THE AESTHETIC AND TECHNICAL DIRECTION THAT TUDOR INTENDS TO GIVE THIS FLAGSHIP RANGE. THE BLACK BAY IS FURTHER PROOF OF THE BRAND'S CAPACITY TO MEET ONE OF THE HIGHEST INDUSTRY STANDARDS IN TERMS OF PRECISION AND MAGNETIC RESISTANCE. TESTED BY METAS, THE SWISS FEDERAL INSTITUTE OF METROLOGY, THE BLACK BAY COMBINES CUTTING-EDGE MECHANICS WITH A DESIGN THAT BUILDS ON TUDOR'S LEGACY OF SEVEN DECADES MAKING ROBUST AND RELIABLE PROFESSIONAL DIVE WATCHES

amorphous silicon dioxide, which is highly resistant to changes in temperature as well as highly elastic, was eventually deployed for the pallet, escape wheel, balance and spring of the brand's Oscillomax® escapement assembly. The evolution of Patek's escapement system introduces the next phase of the silicon story: geometry. Traditional balance springs are a product of design and craft experience - paired by hand with balance wheels, enhanced with subtle alterations such as the Breguet overcoil, again by hand, and fixed, also by hand, to collets for fitting on the balance. Patek's Spiromax® not only offered better stability across temperature ranges (as well as being amagnetic), it was a one-piece component that had its terminal curve designed-in from the start. For the first time, engineers could decide exactly how the spring and balance would behave instead of relying on watchmakers to adjust after the fact. Lithography techniques not only offered precision on a molecular level; that precision allowed mechanical variables to be factored-in from the outset — you could design the precise weight and flexibility of any part of the component, allowing, for example, much tighter meshing

between gear teeth. The new Silinvar® pallets no longer needed jewelling while reduced tolerances meant an increase in efficiency of something like thirty per cent.

### Twenty years of innovation

The next stage of the revolution was conceptual: a realisation that novel materials and techniques were an invitation to think differently about what you wanted to make in the first place. The Freak and Oscillomax® were the appliance of silicon technology to existing, essentially conventional, designs. What came next was demonstrated to me with a paper train ticket: springiness doesn't need an obviously spring-like structure. If you bend the ticket, you can make it snap between two states predictably. This is the underlying idea behind 'compliant mechanism' engineering. As Wikipedia puts it, "In mechanical engineering, a compliant mechanism is a flexible mechanism that achieves force and motion transmission through elastic body deformation. It gains some or all of its motion from the relative flexibility of its members rather than from rigid-body joints alone."









I - CHANEL MONSIEUR TOURBILLON METEORITE.
LIKE THE FRAME AROUND A BEAUTIFUL PAINTING,
THE BLACK CERAMIC CASE OF THIS MONSIEUR DE
CHANEL DRAWS THE EYE TO ITS TWO SINGULAR
FEATURES. CHANEL'S LION SYMBOL SITS AT THE
HEART OF THE TOURBILLON, ROTATING TO THE
RHYTHM OF THE SECONDS. AS FOR THE METEORITE DIAL, THIS MINERAL FRAGMENT MAKES EACH
WATCH UNIQUE.

II - BVLGARI OCTO ROMA STRIKING TOURBIL-LON SAPPHIRE. A CLASSIC WATCH IN ITS TWO CENTRAL HANDS, TOURBILLON AT 6 O'CLOCK AND MANUAL-WINDING. THIS WOULDN'T BE A BVLGARI WITHOUT SOME ROMAN FLAIR. THE MOVEMENT IS COMPLETELY SKELETONISED. REDUCED TO ITS MOST SIMPLE EXPRESSION, IT BATHES IN A SEA OF TRANSPARENCY INSIDE A SAPPHIRE CASE. III. FREDERIQUE CONSTANT HIGHLIFE WORLD-TIMER MANUFACTURE. CELEBRATING THE 35<sup>th</sup> YEAR OF ITS JOURNEY, FREDERIQUE CONSTANT PRESENTS THE HIGHLIFE WORLDTIMER MANUFACTURE IN A 41MM DIAMETER, IN ROSE GOLD OR IN STEEL. ALL THE INDICATIONS, WHICH ARE DRIVEN BY THE IN-HOUSE FC-718 AUTOMATIC MOVEMENT WITH 38 HOURS OF POWER RESERVE, ARE SET BY THE CROWN.

IIII - TISSOT CHEMIN DES TOURELLES POWERMATIC 80 42 MM. NO WATCH CAPTURES THE SPIRIT
OF TISSOT BETTER THAN THE TRULY CLASSIC
CHEMIN DES TOURELLES. ALL THE MODELS IN
THE NEW COLLECTION ARE FITTED WITH THE
POWERMATIC 80 MOVEMENT WITH AN ANTI-MAGNETIC NIVACHRON BALANCE SPRING. OPTIMISED
COMPONENTS RESULT IN 80 HOURS OF POWER
RESERVE.



There's always something to celebrate at Hublot, especially after a record year and with plenty of exciting projects under way. Proof of the former, Hublot's parent group LVMH announced that revenue for its Watches & Jewellery business group had increased by 18% in 2022. Examples of the latter include extension work at the brand's manufacturing facilities in Nyon, Switzerland. Two new buildings are being added to the site which, when completed, will employ over a thousand staff. This can only mean one thing: Hublot is on a roll. What better time to focus attention on the origins of a brand that was established with the mission to shake up the watchmaking establishment?

Doing exactly that, Hublot has released the Classic Fusion Original, in three sizes (33, 38 and 42mm) and three materials, namely yellow gold, black ceramic and titanium. When the Classic Fusion first launched in 1980 it was, says the brand, "the watch that challenged conventions. Refined and sporty, its precious gold case on a simple rubber strap, unthinkable at the time, sent shockwaves through the world of fine

HUBLOT CLASSIC FUSION ORIGINAL. "DARING. SHATTERING ESTABLISHED CONVENTIONS. MASTERING TRADITIONAL HERITAGE TO PUSH BACK BOUNDARIES. MERGING HIGH-TECH COMPOSITES WITH PRECIOUS, NATURAL MATERIALS. WORKING WITH SECTORS AND PEOPLE WHO TRANSCEND OUR MOTTO TO BE 'FIRST, UNIQUE AND DIFFERENT'. FORTY EXHILARATING YEARS HAVE SHAPED THESE CLASSIC FUSION ORIGINALS. WE HAVE REDESIGNED THEM BECAUSE HUBLOT HAS CHANGED. THEY EMBODY THESE REBELLIOUS ALLIANCES THAT

watchmaking. By winning over an audience of connoisseurs who were searching for different watch products, it began a visionary momentum, impelled by audacity." When founder Carlo Crocco designed this first Hublot watch, he was driven by a powerful idea to create a watch that would be practical and hardwearing, simple and comfortable, classic and sporty. Everything about it — the exposed titanium screws securing the bezel, the minimalist black dial, the pairing of gold with natural rubber — pointed to a completely novel approach to luxury, as well as laying the foundations for Hublot's "Art of Fusion" concept in the high-end sports watch segment.

### Back to the future

So what's the picture 43 years later? Speaking at the launch of this Classic Fusion Original in Singapore earlier in the year, CEO Ricardo Guadalupe noted a trend towards watches that are classic but contemporary, with a more understated design. "Introduced in 1980, the Classic Fusion is a clear match for this aesthetic, which is why we are returning to this model, having ceased production in 2005. Trends generally

MAKE US WHO WE ARE TODAY," DECLARES HUBLOT CEO RICARDO GUADALUPE.
HUBLOT BRINGS BACK THE WATCH THAT UPTURNED HOROLOGICAL CONVENTION
ON ITS RELEASE IN 1980. CLASSICAL, WITH A MINIMALIST BLACK DIAL FRAMED BY
A GOLD CASE, AS WELL AS SPORTY, ON A RUBBER STRAP, THIS COMBINATION
OF PRECIOUS METAL AND RUBBER WAS UNHEARD OF AT THE TIME. THE CLASSIC
FUSION ORIGINAL CELEBRATES THIS YOUTHFUL MATURITY WITH AGELESS SIMPLICITY, ECHOES OF CARLO CROCCO'S ORIGINAL DESIGN ARE RECOGNISABLE

last longer in the watch industry than in fashion. After almost twenty years, it was time to come back to our roots. This new interpretation of the 1980s Hublot watch also fits with a growing preference among watch wearers for smaller, more refined styles."

The Classic Fusion Original echoes the inaugural design with the same rubber strap, a polished and lacquered black dial swept by facetted hands, and six screws on the bezel. One difference is the more prominent Hublot logo at 12 o'clock. The movement for the 38mm and 42mm sizes is the automatic HUB1110 with 42 hours of power reserve, while the smaller 33mm size is driven by a quartz movement. Note that the Classic Fusion line also extends to a chronograph and moon phase versions, including skeleton dial executions. Among the various partnership models, sculptor Richard Orlinski, street artist Shepard Fairey and visual artist Takashi Murakami have given their interpretation of the Classic Fusion as part of the "Hublot Loves Art" concept. Certain of these collaborations are also linked to NFTs: proof that. Hublot hasn't finished shaking up the watch world. Eric Dumatin

IN THE RUBBER STRAP, THE PURITY OF THE POLISHED BLACK LACQUERED DIAL SWEPT BY FACETTED HANDS, THE YELLOW GOLD AND THE BRAND SIGNATURE. SIMILAR TO THE ORIGINAL AT FIRST SIGHT, THE LOGO HAS IN FACT BECOME MORE PROMINENT, MORE CONTEMPORARY OVER TIME. TODAY'S CLASSIC FUSION ORIGINAL IS AVAILABLE IN GOLD, TITANIUM AND CERAMIC, IN 42, 38 AND 33MM SIZES. SIX SCREWS PUT THEIR STAMP ON THE BEZEL WHILE A SAPPHIRE CASEBACK REVEALS THE MOVEMENT INSIDE.



### Lessons from the past

Ferdinand Berthoud was born in the Swiss town of Val-de-Travers but his future lay elsewhere, in Paris where he arrived in 1745. A precocious youth, Berthoud's talent earned him the title of master watchmaker at just 26 years of age. At 33 he published his first work, L'Art de conduire et de régler les pendules et les montres. Naturally, a talent such as this must serve a magnum opus. At a time when trading ships and scientific expeditions were setting sail with no reliable means of calculating longitude at sea, Ferdinand Berthoud took up the challenge to build a precise and reliable marine chronometer. The skill and scientific understanding he applied to the conception and making of marine timekeepers, as well as pocket watches, and which he committed to paper in numerous reference works, would open the doors to the Royal Society in London. Louis XV named him Horloger Mécanicien du Roi in 1770. In 1804 Napoleon I made him a Knight of the Legion of Honour.

In 2015, Chopard Co-President Karl-Friedrich Scheufele took it upon himself to revive the legacy of this great figure of the Enlightenment with mechanically and aesthetically refined contemporary watches whose construction references eighteenth-century movements. Entirely focused on precision, the FB 3SPC is a perfect illustration. Its technical and aesthetic foundations are borrowed from the N°26 decimal watch that was made by Ferdinand Berthoud's nephew, Louis, and which paved the way for high-level watchmaking inspired by marine chronometers. For it, the brand has developed a manual-winding mechanical movement with an original construction that includes a balance wheel mounted with a cylindrical balance spring. It took two years to make the precise adjustments required for the movement to obtain official chronometer rating. Its construction is designed so that the three main components that are the balance, pallet lever and escape wheel are clearly visible. This FB 3SPC is entirely aligned with the brand's dedication to producing legible, graphic and three-dimensional movement architectures



FERDINAND BERTHOUD FB 3SPC. THE MAINPLATE IS AT THE HEART OF CALIBRE FB-SPC. ON THE DIAL SIDE, A CLOSE-KNIT ARRAY OF SIX BRIDGES IS DIRECTLY INSPIRED BY THE WORK OF LOUIS BERTHOUD. THEY ARE ECHOED ON THE BACK BY TEN OTHER BRIDGES. THE TIME DISPLAY IS PARED DOWN TO THE ABSOLUTE MINIMUM, COMPLETED BY A POWER-RESERVE INDICATOR. THE REST OF THE DIAL EXPOSES THE MOVEMENT, WHOSE SURFACES ALTERNATE BETWEEN CHAMFERD AND POLISHED BEVELS AND THE MATTE FINISH OBTAINED BY FINE SANDBLASTING. ALTHOUGH COMPLEX IN CONSTRUCTION, THE ARCHITECTURE OF THE MOVEMENT IS MINIMALIST IN APPEARANCE. THE BALANCE BRIDGE, WITH ITS DISTINCTIVE SCREW-IN HEEL SHAPE, IS A HISTORICAL REFERENCE TO FERDINAND BERTHOUD'S N°3 ASTRONOMICAL WATCH. POSITIONED AT 12 O'CLOCK, THE BARREL BRIDGE SPANNING A WIDE 120-DEGREE ANGLE RECALLS A BRIDGE ON THE N°2575 QUARTER-REPEATER WATCH BY LOUIS BERTHOUD.

Girard-Perregaux's Constant Force concept movement from 2013 was built around a silicon blade that, like the paper ticket under stress, has two states of equilibrium. Feed energy into the system and it oscillates precisely and predictably between the two, replacing the entire assembly of balance, spring and pallets with a single component. A similar approach was introduced by Zenith with the Defy Lab movement shown in 2017. Both movements offered exceptional precision with very low energy requirements compared to a standard movement. This thinking has even been deployed into the way normal steel and brass components are conceived, as Patek Philippe's Travel Time illustrates. The module that allows local time to be changed is a single-piece component that replaces around 30 in the previous version of the movement. It's a compliant mechanism, executed in steel that couldn't have been conceived of without the silicon revolution.

The revolution isn't guite complete as neither movement has made it into standard production as yet, having failed to convince in terms of long-term reliability, though it's safe to assume the ideas will reappear. It's this caution that's behind the seemingly glacial pace at which Omega and Rolex have integrated silicon technology into their production — if you have production volumes in the 100,000s, even marginal risks in performance are non-starters. Omega CEO Raynald Aeschlimann's perspective is that the last 20 years have actually been the most innovative in the company's history, replying to my query with a list of advances that include new case alloys, new amagnetic component materials, the roll-out of the Co-Axial escapement, silicon escapement parts, a new chronometer certification standard, new manufactures, reduced servicing and longer warranties. He has a point. As with the era of Arnold, Berthoud, Harrison and Sully. ~









I - HUBLOT SPIRIT OF BIG BANG TOURBILLON
5-DAY POWER RESERVE SKY BLUE CARBON.
A COMBINATION OF CARBON AND TITANIUM
GIVES THIS 42MM BIG BANG ITS UNIQUE APPEAR
ANCE. THE TOURBILLON WAS SKELETONISED
SPECIFICALLY FOR THE TONNEAU CASE. MANUALLY-WOUND, THE MOVEMENT ACCUMULATES
115 HOURS OF POWER RESERVE, SHOWN ON THE
FIVE-DAY INDICATOR AT B O'CLOCK.

II • GIRARD-PERREGAUX ABSOLUTE LIGHT &
SHADE. MEASURING 44MM IN DIAMETER, A METALIZED SAPPHIRE CRYSTAL CASE IMPARTS FASCINATING METALLIC BRILLIANCE TO THIS NEW

LAUREATO, AS WELL AS A SMOKY AURA. THIS VISUAL LIGHTNESS IS ECHOED BY A FEATHER-LIGHT 85 GRAMS ON THE WRIST.

III · RADO TRUE SQUARE SKELETON. THE TOP PLATE OF THE SPLIT-LEVEL DIAL OF THIS TRUE SQUARE SKELETON, CASED IN BLACK MONOBLOC HIGHTECH CERAMIC, IS CUT AWAY TO SHOW THE SKELETONISED R808 MOVEMENT WITH AUTOMATIC WINDING. THE ANTHRACITE TREATMENT ON THE BRIDGES COMPLEMENTS THE NICKEL COLOUR OF THE BOTTOM DIAL PLATE AND ITS CÔTES DE GENÊVE DECORATION.

THE ULTRA-CHRON, THE FIRST HIGH-FREQUENCY DIVE WATCH, UNVEILED IN 1968. THE 43MM STEEL CASE OF THIS NEW INTERPRETATION IS WATER-RE-SISTANT TO 300 METRES. IT CONTAINS A 5HZ AUTOMATIC MOVEMENT THAT WAS DEVELOPED EXCLUSIVELY FOR LONGINES BY ETA.



Did they have any idea how crazy their project was? When Aletta and Peter Stas started the Frederique Constant brand in Geneva in 1988, the cards were stacked against them. First of all, the market had been flooded with quartz watches with little added value. Secondly, they were both completely new to the industry with no experience in watches. Thirdly, the couple are Dutch and, at the time of this career change, were living not in Switzerland but in Hong Kong. Undeterred, Aletta and Peter Stas remained convinced there was a window for quality timepieces that were respectful of tradition and accessibly priced: a vision they would materialise through Frederique Constant. Crazy or not, their minds were made up.

It would take Frederique Constant four years to develop its first range. Appropriately named the 18th Century Collection, it featured mechanical watches with an elegant, classic aesthetic at affordable price points. Already, the hallmarks of a Frederique Constant watch could be seen in this debut range and have never varied, simply embracing the innovation that would underpin the brand's success. For example, Frederique Constant became the first brand to reveal the heart of the mechanical movement through an aperture in the dial at 12 o'clock. This view of the regulating organ, composed of the balance and balance spring, became the signature attribute of the Heart Beat collection, introduced in 1994. The following year it appeared on

FREDERIQUE CONSTANT CLASSIC TOURBILLON MANUFACTURE. ESTABLISHED 35 YEARS AGO, FREDERIQUE CONSTANT CELEBRATES THIS MILESTONE WITH A NEW ITERATION OF ITS CLASSIC TOURBILLON MANUFACTURE, INTRODUCED IN 2008 AND EQUIPPED WITH THE FC-980 CALIBRE, ONE OF THE FIRST TO INCORPORATE AN ESCAPE WHEEL AND PALLET LEVER IN SILICON. THIS LIMITED EDITION OF 150 PIECES IS OFFERED IN A SMALLER 39MM CASE IN 18K ROSE GOLD. A SUNRAY DARK GREY DIAL PAIRS ELEGANTLY WITH FACETTED INDICES, SWEPT BY HAND-POLISHED GOLD-COLOURED HANDS.

lady's models, this time in the shape of a heart. But the best was yet to come: the Stas were determined that Frederique Constant should become an integrated Manufacture with its own production capacity. This strategy took shape with the opening, in 2006, of a purpose-built factory on the outskirts of Geneva that would be extended in 2019.

### 35 years and 31 movements

Building on this production capacity, in 2004, in time for the Heart Beat's tenth anniversary, Frederique Constant unveiled the FC-910, the first in a long line of in-house movements. In barely 20 years, the brand accomplished the exploit of designing and manufacturing a remarkable 30 movements, using tradition as its foundation but never shying away from innovation. This progressive approach has always been a driving force for the brand, one of the first to incorporate silicon technology into its movements with the release, in 2008, of the FC-980 tourbillon calibre with a silicon lever and escape wheel. Complications would follow, including a world time function, perpetual calendar, moon phases and flyback chronograph. Not forgetting a pioneering venture into smartwatches with a first model introduced in 2015, when the Swiss watch industry was still firmly on the mechanical side of the fence, and in 2018 when the Classic Hybrid Manufacture broke new ground by combining connected functionalities with an in-house automatic movement.

FREDERIQUE CONSTANT CALIBRE FC-810 MONOLITHIC MANUFACTURE. FREDERIQUE CONSTANT HAS ENGINEERED A BREAKTHROUGH IN PRECISION TIME-KEEPING WITH THE FC-810 MONOLITHIC CALIBRE. REDEFINING THE PRINCIPLE OF HOW A MECHANICAL WATCH IS REGULATED, THIS 40 HZ MOVEMENT BEATS TEN TIMES FASTER THAN THE MAJORITY OF MECHANICAL MOVEMENTS. ITS OSCILLATOR, WHICH IS ETCHED FROM A SINGLE PIECE OF SILICON, IS DESIGNED TO FIT A TRADITIONAL MOVEMENT CONFIGURATION AND ELIMINATES MANY OF THE MAIN WEAKNESSES OF A MECHANICAL WATCH.

The masterstroke came in 2021 with the unveiling of the FC-810 calibre which transformed the functioning of the escapement, unchanged for the past two hundred years. Rather than the usual 26 components of a Swiss lever escapement, Frederique Constant developed a revolutionary oscillator made from a single silicon wafer. This Monolithic regulator represents a huge technological breakthrough. At 40 Hz it beats ten times faster than the escapement at the heart of most mechanical movements and maintains a full 80 hours of power reserve. Speaking at the Watches and Wonders Geneva fair, Niels Eggerding, CEO since 2018 of the brand which is now part of the Citizen group, declared that "we are especially proud of everything Frederique Constant has achieved these past years and are celebrating this with our first time at Watches and Wonders. Frederique Constant is a fabulous journey; a dream that became reality with innovation at its heart."

Marking the occasion of its thirty-fifth anniversary, the brand has released its Tourbillon Manufacture in a resolutely contemporary execution. Significantly, it is also unveiling its thirty-first in-house movement, the FC-735, which debuts in the Classic Power Reserve Big Date Manufacture. Cased in steel, it strikes a perfect balance between displays for the large date, moon phases and 50-hour power reserve. Thirty-five years... and counting!

FREDERIQUE CONSTANT MANUFACTURE CLASSIC POWER RESERVE BIG DATE.

THE FC-735 MOVEMENT INSIDE THE CLASSIC POWER RESERVE BIG DATE,
WHICH JOINS FREDERIQUE CONSTANT'S MANUFACTURE COLLECTION, IS
THE THIRTY-FIRST CALIBRE TO BE DESIGNED AND MANUFACTURED ENTIRELY
IN-HOUSE BY THE BRAND. FRAMED BY A 40MM CASE IN STEEL, THE SUNRAY
BLUE DIAL CARRIES APPLIED INDICES AND HAND-POLISHED SILVER-COLOURED
HANDS. BOTH THE HANDS AND THE INDICES ARE DIAMOND-CUT FOR MAXIMUM
BRIGHTNESS.



The place is Florence; the year is 1916. Guido Panerai is working in the family shop, on Piazza San Giovanni, on a radium-based compound whose luminous properties literally outshine anything ever invented before. There is, of course, a reason for Guido's experimentations. The company his grandfather founded in 1860 had already made a name as a supplier of precision instruments to the Royal Italian Navy. And Guido's invention, which he called "Radiomir", was particularly suited to night sighting systems, including on torpedo launchers. This new substance would further strengthen ties between Panerai and the country's military forces. Accordingly, when the Italian Navy went in search of a dive watch that it could issue to its commando frogmen, luminescence would be a key criterion and Panerai its first port of call. An initial prototype was presented in 1935. Its name? The Radiomir.

Already, the Panerai we know was contained in a watch governed by the principles of functionality and performance that continue to guide the brand. It was large, to say the least, with a case in three parts and a screwdown back and crown for maximum water-resistance. The strap was attached to wire lugs that were soldered to the case, whose cushion shape better absorbed shocks.

PANERAI RADIOMIR CALIFORNIA. PANERAI PRESENTS ITS FIRST CALIFORNIA DIAL IN A 45MM DIAMETER CASE. THIS RADIOMIR CALIFORNIA PAM01349 ALTERNATES ROMAN AND ARABIC NUMERALS WITH BAR INDICES. MINUTES ARE SHOWN ON A RAILROAD TRACK THAT RUNS AROUND THE PERIPHERY OF THE DIAL. PANERAI'S "BRUNITO" FINISH FOR THE CASE IN ESTELEL", AN ALLOY MADE WITH 95% RECYCLED STEEL, GIVES A UNIQUE WEATHERD EFFECT. THE MANUAL-WINDING P.5000 MOVEMENT DELIVERS EIGHT DAYS OF POWER RESERVE.

Guido's luminous compound ensured the perfect legibility of this robust tool watch: a vital piece of equipment for a military diver carrying out missions. For many years, Officine Panerai watches were military issue only, until two events brought the brand into the public gaze. One was the launch of three "civilian" collections in 1992; the other was a certain Sylvester Stallone's interest for Panerai watches, which he discovered while shooting his 1996 movie *Daylight* in Rome. Panerai stepped out of the shadows into the spotlight, helped by Richemont which acquired the brand in 1997.

### Surgical precision

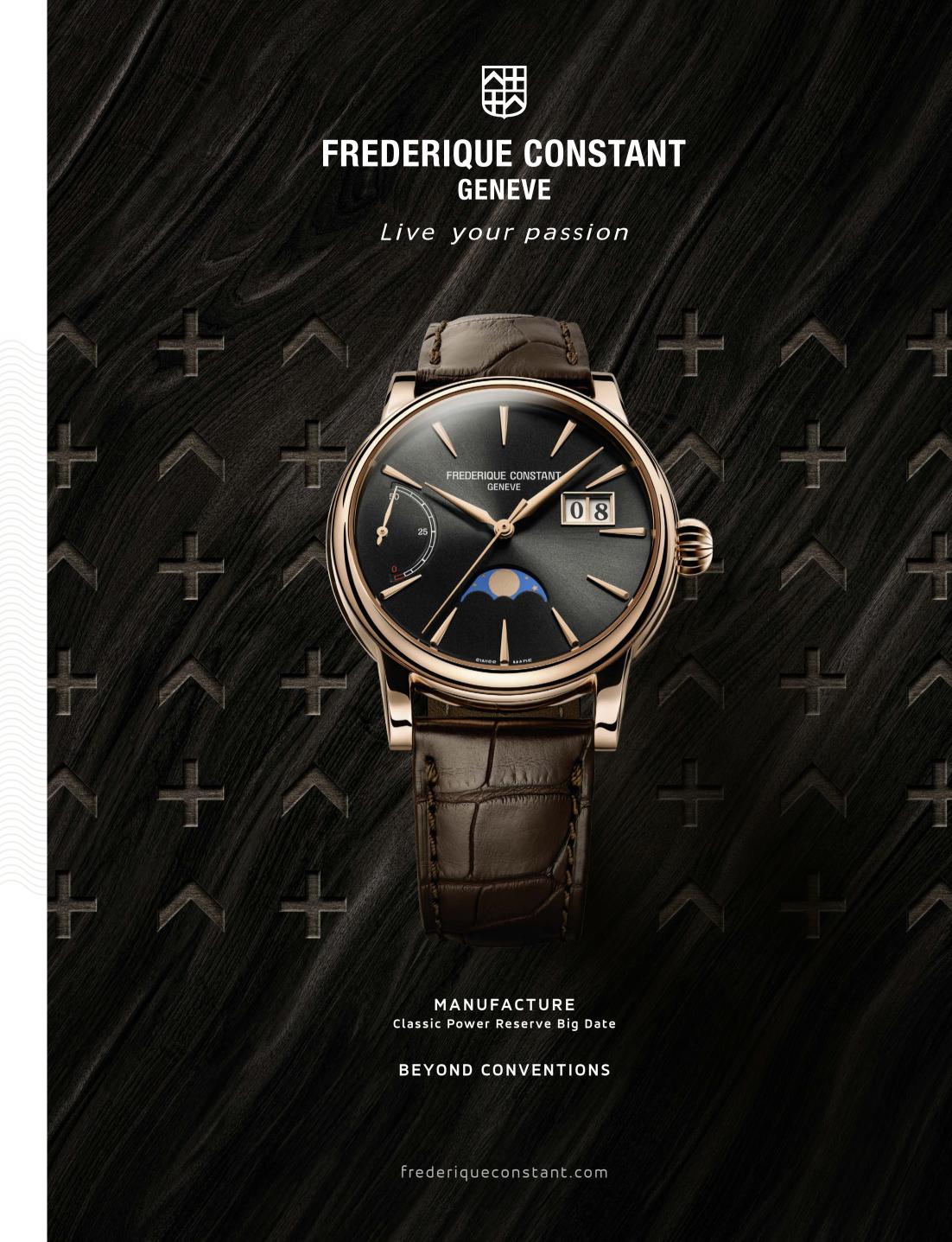
"I got a call from Richemont management asking if the name Panerai meant anything to me," recalls the group's creative director Giampiero Bodino, at the Watches and Wonders fair in Geneva. "It certainly did. I was already a huge fan and started working on the Radiomir... in exchange for a watch!" Giampiero Bodino was never tempted to make a clean sweep of the past. With a surgeon's focus, he instead introduced subtle changes to adapt Panerai's designs to the tastes and needs of the modern watch-wearer, forging a unity of style for a brand whose military past has become its greatest strength.

PANERAL RADIOMIR CALENDARIO ANNUALE GOLDTECH™. PANERAL HAS ENGINEERED ITS FIRST EVER ANNUAL CALENDAR — A COMPLICATION THAT REQUIRES A SINGLE ADJUSTMENT OF THE DATE PER YEAR — ESPECIALLY FOR THE RADIOMIR COLLECTION. ONE OF THE FEATURES THAT SETS THIS RADIOMIR CALENDARIO ANNUALE GOLDTECH™ APART IS THE DISPLAY OF THE MONTHS AROUND THE EDGE OF THE SANDWICH DIAL. A FIXED ARROW AT 3 O'CLOCK POINTS TO THE CURRENT MONTH ON A ROTATING DISC. AT THE END OF EACH MONTH, THE DISC JUMPS INSTANTANEOUSLY TO THE NEXT. THE EYE MOVES EASILY BETWEEN

The models on show in Geneva are the proof, starting with the Radiomir California and the Radiomir Otto Giorni whose case in eSteel — which contains 95% recycled metal — boasts a "Brunito" (burnished) finish, achieved by physical vapour deposition then hand-finished to give each watch its unique weathered appearance. These vintage models take us back to the days of those early combat divers in a year which Panerai CEO Jean-Marc Pontroué describes as "steeped in history". Elsewhere, the brand is playing down its military heritage as it debuts its first annual calendar complication, with two versions of the Radiomir Calendario Annuale, one in Goldtech™ and one in Platinumtech™, both proprietary alloys. An instantaneous-change month display features on a disc at the periphery of the dial. Catering to smaller wrists, the Radiomir Quaranta Goldtech™ takes its name from the Italian word for "forty", which is the watch's diameter in millimetres.

Incidentally, the fifteen buyers of the Radiomir Calendario Annuale in platinum will be invited to Rome for a threeday "experience" which this time will have them not jumping out of planes with special forces but sampling the city's cultural delights in the company of a brand that has lost none of its Latin charm. Eric Dumatin

THE DIFFERENT CALENDAR INDICATIONS, WHILE HOURS AND MINUTES REMAIN CLEARLY LEGIBLE. THIS READABILITY IS FURTHER ENHANCED BY THE LUMINES-CENT TREATMENT ON THE INDICES, ARABIC NUMERALS AND BATON HANDS. THE P9010/AC MOVEMENT IS AUTOMATICALLY WOUND AND DELIVERS THREE DAYS OF POWER RESERVE. THERE ARE TWO VERSIONS, BOTH IN A 45MM CUSHION CASE IN ALLOYS DEVELOPED BY PANERAI: ONE IN GOLDTECH™ WITH A BLUE DIAL AND A SECOND IN PLATINUMTECH™ WITH A BURGUNDY DIAL.







### Cartier