WATCHES FROM IWC 2010/11
CRAFTSMANSHIP MADE IN SCHAFFHAUSEN

IWC

INTERNATIONAL WATCH CO. SCHAFFHAUSEN
SWITZERLAND, SINCE 1868

WATCHES FROM IWC 2010/11
CRAFTSMANSHIP MADE IN SCHAFFHAUSEN

Technical details
The “jewels” (often referred to as rubies) used in wristwatches are not genuine precious stones. Designed to reduce friction as well as mechanical wear and tear, they are made of industrial-standard rubies and are used mainly for bearings, levers and intermeshing elements, as well as parts of the escapement. Generally speaking, the material used for watch jewels today is synthetically manufactured ruby. The reason for this is that it has practically the same physical and chemical properties as naturally occurring rubies but is purer and has a more homogeneous crystalline structure.

Technical and other specifications may change without notice, and all models and product lines are subject to availability. The information provided here refers exclusively to the model named or is of a general nature. In view of the high level of manual craftsmanship involved, heights and other specifications are subject to production tolerances.

The IWC Vintage Collection is a contemporary reinterpretation of selected classical IWC watch models.

The illustrations in this catalogue may show watches with customised or special features that are available only at additional cost upon request.

Not all the watches in this catalogue are shown in their original size. For printing-related reasons, there may be deviations in the colours of the watches illustrated. It should be noted that when natural materials are used (e. g. leather) differences in colour and appearance cannot be excluded. Natural materials are not suitable for use in and under water.

The position of tool recesses and engravings on screw-in back covers may vary from watch to watch.

* IWC Schaffhausen is not the owner of the Glucydur®, Nivaflex® and Super-LumiNova® trademarks.
** The Aquatimer bracelet quick-change system has been developed by IWC under a patent license from Cartier.

Annual Edition 2010/11, effective from April 2010

CONTENTS

TRAILBLAZING PRECISION INSTRUMENTS FROM SCHAFFHAUSEN

Portugal's rise to its position as a leading seafaring nation 500 years ago would have been impossible without experienced sailors and precision nautical instruments. Henry the Navigator assembled the most gifted cartographers, astronomers and mariners of his time. Great explorers such as Bartolomeu Dias, Vasco da Gama and Ferdinand Magellan used the astrolabe, Jacob's staff and quadrant to help them determine their latitude. These and other groundbreaking inventions such as the compass, the sextant and, finally, the chronometer opened up the way to new horizons.

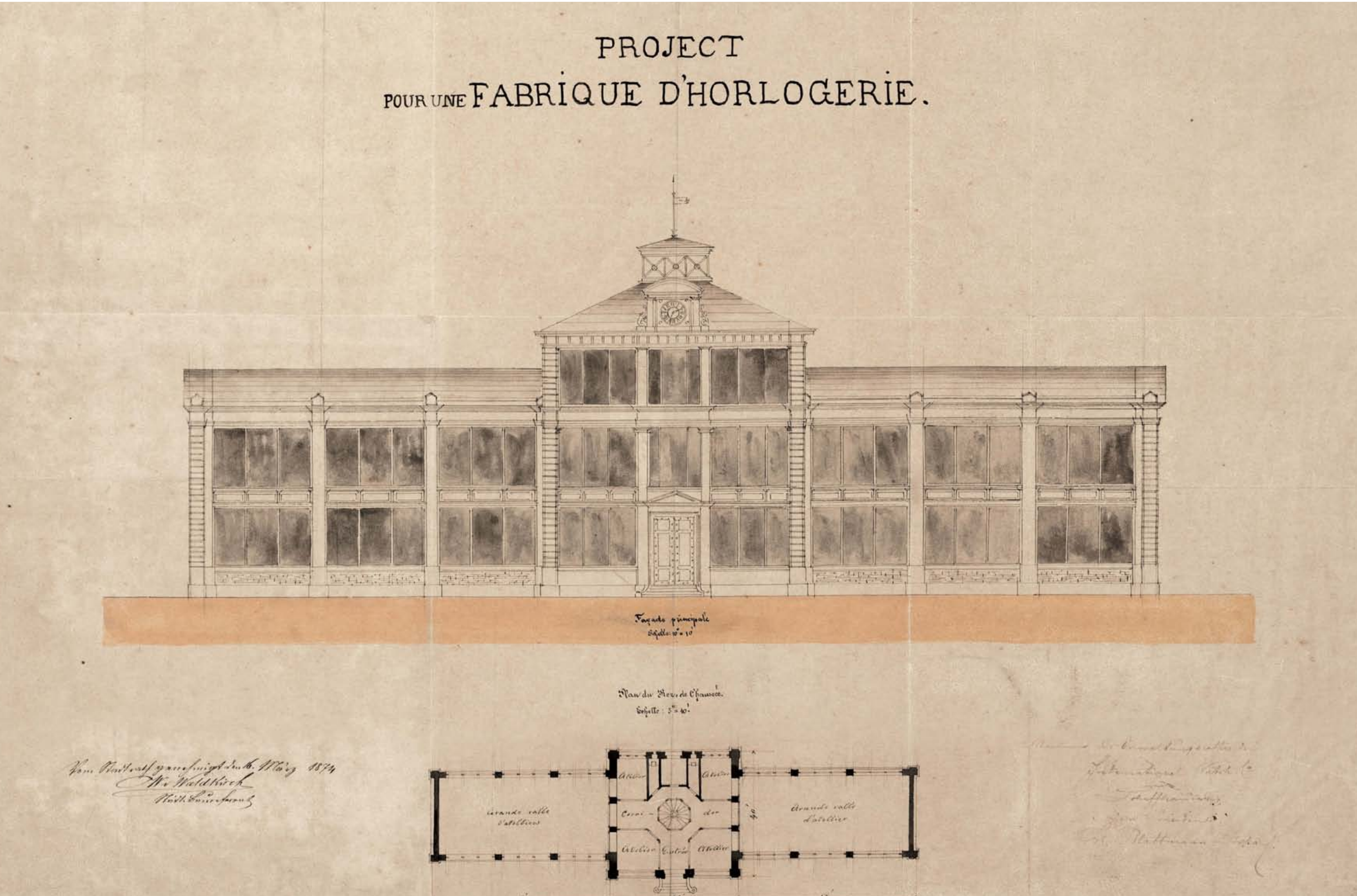
IWC Schaffhausen has a long tradition in the manufacture of mechanical precision instruments. As early as 1915, the company was making pocket watch-size deck watches for the Royal Navy that enabled navigators to establish their position on the high seas using a sextant. In 1939, IWC delivered its first Portuguese wristwatches: larger-than-life timepieces with pocket watch movements and the accuracy of marine chronometers.

This year, IWC unveils several new additions to the Portuguese watch collection: models whose clear design, size and precision are an acknowledgement of their illustrious heritage. At the same time, the famous IWC watch family provides a number of surprises such as the sporty, but elegant, Portuguese Yacht Club Chronograph, a revival of one of the most successful IWC watches since the 1970s. For the first time ever at IWC, the new Portuguese Tourbillon Mystère Rétrograde combines the magical flying tourbillon with a date display that reverts smartly to the first of the month. Another premiere: 20 years after its first appearance, the Grande Complication, the most intricate of all IWC watches, debuts in a Portuguese case, making it the undisputed flagship of the entire Portuguese fleet.

The Da Vinci line, long a source of especially innovative timepieces, welcomes the Da Vinci Chronograph Ceramic, a seamless blend of high technology with a deeper dimension: the case, made of ultra-hard high-tech ceramic and titanium, guarantees optimum protection, while the "floating" chapter ring lends a fascinating 3-D effect to the dial.

We wish you many hours of entertaining and informative reading with this Annual Edition.

Yours IWC Schaffhausen


PROJECT
POUR UNE FABRIQUE D'HORLOGERIE.
Façade principale
Plan du Rez de Chaussée
Grande salle d'ateliers
Grande salle d'atelier
Atelier
Atelier
Atelier
Atelier

AMERICAN PIONEERING SPIRIT MEETS SWISS TRADITION

Roaring masses of water plunge over the rocky cliffs that make up the world-famous Rhine Falls. A few kilometres upstream, in Schaffhausen, the Rhine glides at a leisurely pace past the workshop windows of IWC. Here, over 140 years ago, a company began a story that is still being written today. At the tender age of 27, the American engineer and watchmaker Florentine Ariosto Jones had been the deputy director and manager of the E. Howard Watch and Clock Co. in Boston, then a leading American watchmaker. At a time when most people were trying their luck in the west, Jones went in the opposite direction. His journey took him across the Atlantic to Switzerland, where wages were still comparatively low. His plan was to combine the outstanding craftsmanship of the Swiss with modern engineering technology from overseas and his own pioneering spirit to manufacture high-quality watches for the American market. However, the skilled workers in the Geneva region and the remote valleys of western Switzerland met his plans with scepticism. Since the 17th century, they had been working from their homes or in tiny workshops. Jones, on the other hand, was dreaming of building a modern factory with centralised production.

It was then that Jones chanced on an industrialist from Schaffhausen by the name of Heinrich Moser. At this time, Schaffhausen already had a long clockmaking tradition. The first clock ever mentioned in the records was made way back in 1409 at the Rheinau Monastery, ten kilometres further down the Rhine. It had been produced for the Church of St. John in Schaffhausen. There are also official records of a clockmakers' guild in the town since 1583, and it was also home to the famed Habrecht family of clockmakers, who built one of history's most outstanding astronomical clocks for Strasbourg cathedral. Nevertheless, it was Jones's plan to manufacture relatively large numbers of high-quality watches in-house to precisely the same tolerances which enabled these watches made in Schaffhausen to become famous all over the world.

Top: The founder of IWC Schaffhausen, Florentine Ariosto Jones
Right: The Jones calibre, named after IWC's founder

In Schaffhausen, Jones found all he needed to turn his plans into reality. Moser had built a hydro station powered by water from the Rhine. The energy it generated was transmitted directly, via shafts and cables, to the newly built factory and supplied the power needed to drive the machines. The railway line to Schaffhausen had been completed in 1857, so it was no wonder that the town was enjoying an economic boom. For the man from Boston, it was a case of being in precisely the right place at the right time; and in 1868, F. A. Jones founded his watch factory: the International Watch Co (IWC).

Left: One of the first Portuguese watches: this model went on sale with the 74-calibre pocket watch movement in 1942
Top: IWC's historic headquarters with the newly built extensions and the IWC museum


SLOW
FAST
INTL. WATCH Co.
EIGHTEEN (18) JEWELS
ADJ TO FIVE (5) POSITIONS
C.98295

THE QUEST FOR TECHNICAL PERFECTION IS PART OF THE COMPANY'S PHILOSOPHY

Trailblazing technology from Schaffhausen
The development and continuous improvement of movements, functional displays and cases has been part of IWC's philosophy since 1868. Complications such as perpetual calendars, tourbillons and minute repeaters are not only historically significant achievements in the art of watchmaking but also the fruit of the company's in-house design and development efforts. In order to meet its demanding, self-imposed quality standards, IWC has its own completely equipped and dedicated laboratory.

From the Jones calibre to the Pellaton winding system
The company's excellent reputation was established right from the start with the very first Jones calibre named after the founder of IWC. Its many outstanding features included a compensating balance, a Breguet spring and an elongated index to facilitate precision adjustment. Towards the end of the 19th century, IWC used its 64-calibre ladies' pocket watch movement in its first wristwatches. The first real wristwatch movements – the 75 calibre, which had no seconds display, and the 76 calibre with its small seconds – followed in 1915. In 1946, the 89 calibre, the first design to come from IWC's technical director of the time, Albert Pellaton, made a deep impression with its exceptionally precise rate. Pellaton's masterpiece – IWC's first automatic movement featuring the winding mechanism that still bears his name – appeared in 1950.

Top and right: In the bidirectional Pellaton automatic winding system, two pawls transmit energy generated by the movement of the rotor

IWC CALIBRES: THE GREAT LEGACY OF THE IWC POCKET WATCHES

Calibre	Height	Diameter basic movement	Frequency	Jewels	Winding*	Power reserve	Date	Special features	References
50000-calibre family									
51011	7.6 mm	37.8 mm	21,600/h/3 Hz	42	S	7 days	X		5001
51111	7.6 mm	37.8 mm	21,600/h/3 Hz	42	S	7 days	X		5004
51113	7.6 mm	37.8 mm	21,600/h/3 Hz	42	S	7 days	X		5005
51613	8.8 mm	37.8 mm	21,600/h/3 Hz	62	S	7 days	X	Perpetual calendar	5023
51614	8.8 mm	37.8 mm	21,600/h/3 Hz	62	S	7 days	X	Perpetual calendar	5021
51900	8.9 mm	37.8 mm	19,800/h/2.75 Hz	44	S	7 days	X	Tourbillon, retrograde date	5044
80000-calibre family									
80110	7.3 mm	30 mm	28,800/h/4 Hz	28	S	44 h	X		3236
80111	7.3 mm	30 mm	28,800/h/4 Hz	28	S	44 h	X		3231, 3233, 5461
89000-calibre family									
89360	7.5 mm	30 mm	28,800/h/4 Hz	40	S	68 h	X	Chronograph	3764, 3766, 3769, 3784, 3902
89800	9.9 mm	30 mm	28,800/h/4 Hz	52	S	68 h	X	Perpetual calendar (digital)	3761
98000-calibre family									
98295	4.7 mm	37.8 mm	18,000/h/2.5 Hz	18	H	46 h			5445, 5454
98300	4.7 mm	37.8 mm	18,000/h/2.5 Hz	18	H	46 h			3254
98800	6.1 mm	37.8 mm	18,000/h/2.5 Hz	18	H	46 h		Moon phase	5448
98900	4.7 mm	37.8 mm	28,800/h/4 Hz	21	H	54 h		Tourbillon	5447
98950	8.6 mm	37.8 mm	18,000/h/2.5 Hz	52	H	46 h		Minute repeater	5449

* S = self-winding, H = hand-wound

50000-calibre family


80000-calibre family


89000-calibre family


98000-calibre family

THE 50000-CALIBRE FAMILY

The 50000-calibre family represents a wide range of different movements that have one thing above all in common: their unmistakably large dimensions. They feature some of the best ideas ever to appear in an automatic movement (among them the legendary Pellaton winding system) together with a balance and Breguet spring for maximum precision. Apart from this, the IWC 50000-calibre family with its 7-day power reserve represents a giant leap forward in the history of automatic movements: 1,960 complete revolutions of the rotor wind the movement for a full 7 days.

Top: The 50000-calibre family has a power reserve of 168 hours. Readily identifiable: the bidirectional Pellaton winding system, one of the most effective automatic mechanisms in the world

THE 80000-CALIBRE FAMILY

The Pellaton winding system is the cornerstone not only of the 50000-calibre family but also of the 80000-calibre family. In addition, it constitutes a point of departure for innovations in watchmaking technology. Continuous improvements, occasioned by the use of new materials, for instance, have led to a significant increase in its service life. The 85 calibre became part of the legend of ultra robust watches. One of the most rugged movements ever manufactured by IWC was the 80110 calibre, unveiled in 2005. It offers maximum protection against abrasion and other defects, is easily accessed for servicing and has been continuously improved in terms of reliability and shock-absorption. Tough and attractive by equal measure, the IWC-manufactured 80111 calibre is featured in References 3231, 3233 and 5461 of the IWC Vintage Collection, where it can be viewed through a transparent sapphire-glass back.

Top: The automatic spring bridge in the 80111 calibre is excellent at offsetting and absorbing impact from all directions

THE 89000-CALIBRE FAMILY

Developed and manufactured completely by IWC in Schaffhausen, the 89360-calibre chronograph movement features a significantly improved self-winding system and sets new watchmaking standards. The new design, which occupied an IWC development team for a full 4 years, was necessitated by a revolutionary chronograph display that enables the user to read off even relatively long times – 8 hours and 52 minutes, for example – at a glance: a circular totaliser combines the hour and minute counters as if they were a watch within a watch. Apart from this, the winding system now has four instead of two pawls to transmit the energy developed by the rotor, increasing the mechanism's efficiency by a noticeable 30 percent. After further development, the movement was known as the 89800 calibre and used for the large digital date and month displays in the Da Vinci Perpetual Calendar Digital Date-Month.

Top: The 89360 chronograph movement has a totaliser to display the stopped hours and minutes, which can be read off without being added together

THE 98000-CALIBRE FAMILY

The 98 calibre, which was manufactured from the mid-1930s for the hunter pocket watch, has been regularly improved by IWC for over 80 years. Since it is so ideally suited for large hand-wound wristwatches, it is no coincidence that it is very closely associated with the story of the Portuguese wristwatches. One of the highlights in the calibre's history was the anniversary Portuguese wristwatch unveiled in 1993 with the 9828 calibre, which among other things featured a balance with shock-resistance. Combining an elongated index, on the one hand, with a modern Glucydur®* beryllium alloy balance on the other hand, the 98290 calibre used in the Portuguese F. A. Jones combines tradition and technological progress. Calibres from the 98000-calibre family are also found in some of the watches in the current IWC Vintage Collection as well as in the new Portuguese Hand-Wound models and the Portuguese Tourbillon Hand-Wound.

Top: A hallmark of the 98000-calibre family is the elongated index, which was a feature of the earliest Jones calibre

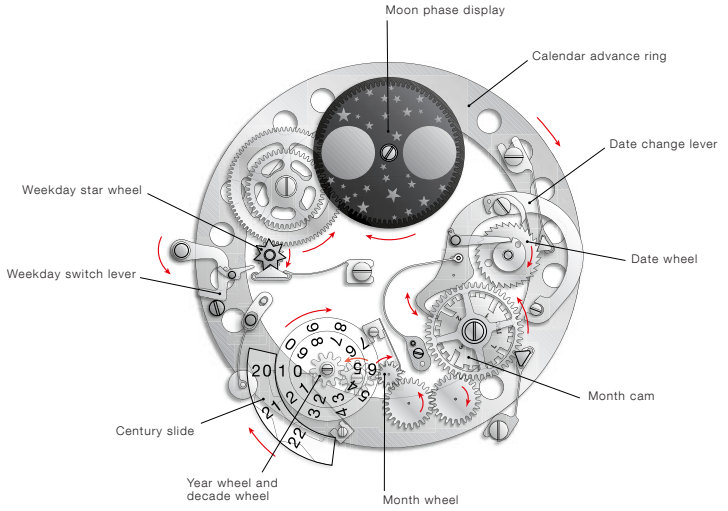
IWC COMPLICATIONS: MASTERPIECES OF HAUTE HORLOGERIE

The in-house perpetual calendar from Schaffhausen
The design of the perpetual calendar was a feat of watchmaking genius that finally paved the way for IWC's entry into the world of Haute Horlogerie. A mechanical masterpiece, it takes into account all the complexities of the leap years; in other words, it recognises all the years that can be divided, without remainder, by four (e. g. 2012), as well as the centuries that can be divided, likewise without remainder, by 400 (e. g. 2400). These leap years all have a 29th day in February. Years at the turn of the century that leave a remainder when divided by 400 – the next ones are 2100, 2200 and 2300 – are not leap years. In cases like these, calendars with an analogue display will need to be advanced by 1 day on 1 March by a watchmaker. Calendars with a digital display can be adjusted by the owner.

The perpetual calendar's century slide with an analogue display turns each new century into a major event. The current century slide bears the numbers 20, 21 and 22 and will thus come to the end of its service life on 31 December 2299; but even now, IWC supplies the century slide bearing the figures 22, 23 and 24 for the years 2200 to 2499.

Analogue date and moon phase displays
Analogue date displays with hands have a long tradition in IWC watches featuring perpetual calendars. In the case of the Portuguese Perpetual Calendar, for instance, the date, day and month are to be found on three subdials and, thanks to the clear layout, are extremely easy to read.

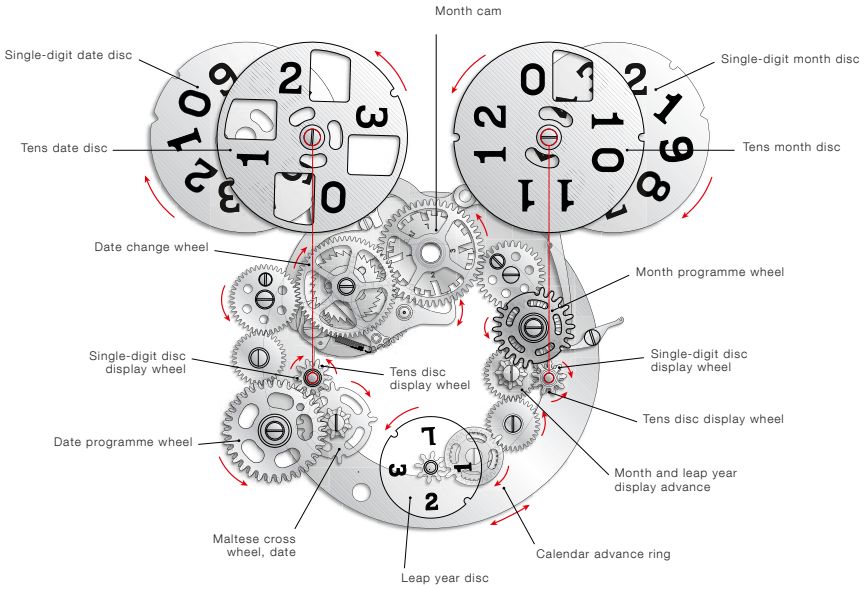
The classic moon phase display – whether a single moon, or a double one for the northern and southern hemispheres – is based on discs and is usually found at "12 o'clock". The moon phase displays used in the Grande Complication and the Da Vinci Perpetual Calendar Edition Kurt Klaus are astonishingly accurate and deviate by just 0.002 percent, or 1 day, after 122 years. The Portuguese Perpetual Calendar is even more precise. Larger moon phase wheels with different numbers of teeth reduce the deviation so drastically that a future inheritor of the watch would theoretically need to take it to a watchmaker to have it adjusted by only 1 day after 577.5 years.



Top: The calendar module of the Portuguese Perpetual Calendar. The century slide moves through an angle of 26 degrees after the balance completes 25.2 billion beats

Digital date display

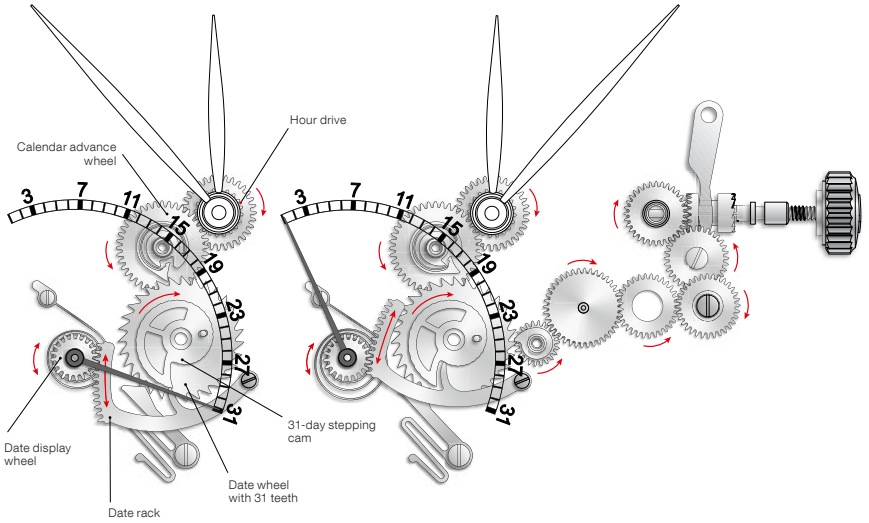
IWC produced the first “digital” watches in its history as early as 1884. The “Pallweber watches”, as they were known, displayed the hours and minutes using numerals, while the seconds were shown in analogue form with a hand. In 2009, IWC unveiled a surprise for watch lovers in the form of a newly developed perpetual calendar movement (cf. page 130), which shows not only the date but also – for the first time in an IWC watch – the month in large numerals. The energy required to advance the month indicator discs is built up continuously throughout the month by a quick-action switch. A spring-loaded lever on the quick-action switch is lifted a tiny bit further each day by a cam. At the end of the month, the tension in the spring has reached its maximum, and it is time for all that energy to be released; the quick-action switch jumps instantaneously to its starting position and advances both of the month indicator discs individually, or together, by one position, depending on the month. On 31 December, the leap year disc is also advanced at the same time.



Top: The Da Vinci Perpetual Calendar Digital Date-Month shows the date and month in large numerals

Retrograde display

In the new retrograde date display, the hand reverts automatically to “one” after the 31st of the previous month. Its name is explained by the fact that it does so in an anticlockwise direction. In months with fewer than 31 days or when the watch has not been used for a while, the date display can be advanced rapidly using the crown and jumps back to the first of the month. This does not involve resetting the time. This unusual type of display not only gives the wearer a very special feel for time; unlike a classical date disc, it has the additional advantage that it does not conceal the cantilever-mounted tourbillon in the new Portuguese Tourbillon Mystère Rétrograde. Last but not least, the moment at the end of each month when the large hand reverts instantaneously to its starting position is a remarkable event in itself.



Top: The spring of the date display wheel is tightened via the snail-shaped cam and its rack. After the 31 days have elapsed or – as shown here – by activating the rapid-advance mechanism via the crown, the feeler on the rack jumps from the outer to the inner surface of the cam. The spring is no longer under tension and allows the date hand to jump back to “one”

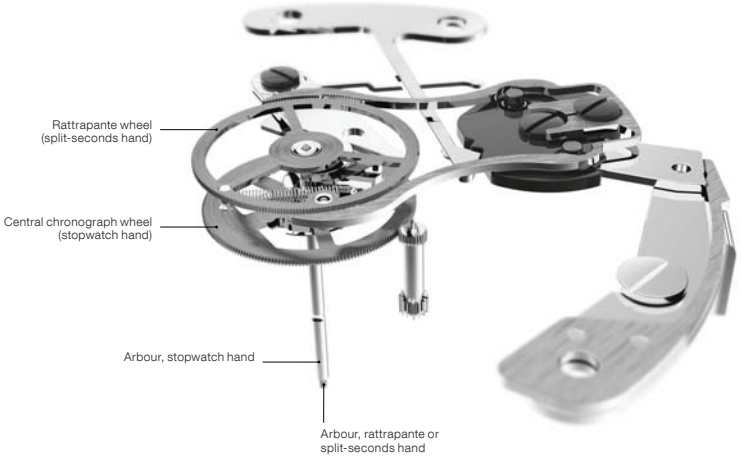
Minute repeater
It took 50,000 hours to develop the highly complex minute repeater strike train for the Grande Complication and the Portuguese Minute Repeater. It is operated by an eye-catching repeating slide on the left-hand side of the case and chimes out the time in crystal-clear tones: the hours on the lower-pitched of the two gongs, followed by a double strike on both gongs for the quarters and finally a single strike on the higher-pitched gong for the minutes. Every gong is individually handmade and carefully tuned for pitch and tonal purity. The all-or-nothing piece, as it is known, ensures that the mechanism will never chime out an incomplete – and thus incorrect – series of acoustic tones even if the repeating slide is released too early.

Top: The minute repeater chimes out the time in hours, quarters and minutes whenever required

Tourbillon
The tourbillon – or, as it literally translates, the “whirlwind” – has long been considered the ultimate achievement in mechanical watchmaking. Originally, this most exclusive of all watch complications was intended to offset the gravitational error inevitable in an oscillating system with a balance and spring by distributing the error evenly over a single plane. The solution: to put the balance, pallets and escape wheel in a tiny cage that would then rotate around its own axis once every minute. The construction of this mechanism represents an enormous challenge, and results in a filigree work of art consisting of 81 parts. In the new Portuguese Tourbillon Mystère Rétrograde, the tourbillon at “12 o’clock” appears to come alive and is the focal point of the entire dial.

Top: The tourbillon mechanism, a filigree construction consisting of 81 parts

Rattrapante
The word “rattrapante” describes the split-seconds mechanism on a chronograph which catches up with the primary chronograph hand. Unlike a standard chronograph, the split-seconds chronograph has two hands that start simultaneously. The rattrappante or split-seconds hand, which is superimposed on the stopwatch hand, can be stopped independently using a third button at “10 o’clock”, while the stopwatch hand continues to run. This permits the user to record two separate times, exact to the second, within any given minute. If the third button is pushed again, the split-seconds hand instantaneously catches up and is synchronised with the other hand. The process can be repeated as often as desired.



Top: Split-seconds mechanism with rattrapante wheel and clamp

UTC world time watch
In 1884, the earth was divided up into 24 time zones. These start with the prime meridian, which runs straight through Greenwich Observatory, near London. UTC stands for Universal Time Coordinated, the time standard by which all pilots flying internationally take their bearings. Taking universal time as a constant, the UTC mechanism permits the time and date to be turned back or advanced using the watch crown. World time, or any other time of the wearer’s choice, runs parallel to local time in a window on the dial. This means travellers in distant countries only need to glance at the watch to know whether it is night or day back home.

Top: The UTC mechanism has displays for local and world time

IWC CASES: EXQUISITE MATERIALS AND EFFECTIVE PROTECTION

Materials
Only the very finest precious metals are used in IWC watch cases. Of all these, platinum, a discreet, rare and heavy metal with a fineness of 95 percent, is the purest.

Gold, a timeless precious metal of lasting value, is the embodiment of luxury and elegance. For its collections, IWC uses 18-carat gold, containing 75 percent of the pure metal. Since pure gold would be too soft for use in a watch case, it is alloyed with other metals, which also gives it the desired colour: palladium for white gold, or silver and copper for yellow, rose and red gold (the higher the copper content in these alloys, the darker the material). Stainless steel is an extraordinarily tough material and, when used in IWC cases, unusually resistant to corrosion.

In 1980, IWC became the first watchmaking company to launch a chronograph in a titanium case. Apart from their attractiveness as design features, titanium and special titanium alloys are particularly suitable for cases and bracelets because they weigh approximately 50 percent less than stainless steel, are totally corrosion-resistant, do not irritate the skin and are highly nonmagnetic. IWC also pioneered the use of ceramics for the watch industry and, in 1986, released the first Da Vinci in a coloured zirconium oxide case. No other material is able to withstand such high temperatures or such mechanical and chemical extremes. Both materials – titanium and ceramic – are brought together in the new Da Vinci Chronograph Ceramic.

Left: For its watch cases, IWC only uses materials of the very highest quality. The official hallmarks guarantee certified precious metal standards

Protection against magnetic fields
Like many of the Pilot's Watches, some of the models in the Ingenieur family also offer optimum protection against the effects of external magnetic fields in the form of a soft-iron inner case. The inner back plate, casing ring and dial are made from pure iron and are particularly adept at conducting magnetic flux lines around the movement. This combination prevents magnetic fields from reaching the movement and guarantees maximum precision in both normal and extreme situations. Depending on the model in question, the protection provided here – of up to 80,000 amperes per metre – exceeds the Swiss norm for "antimagnetic watches" by more than sixteenfold.

Top: The dial, casing ring and inner back plate of the case form a soft-iron inner case

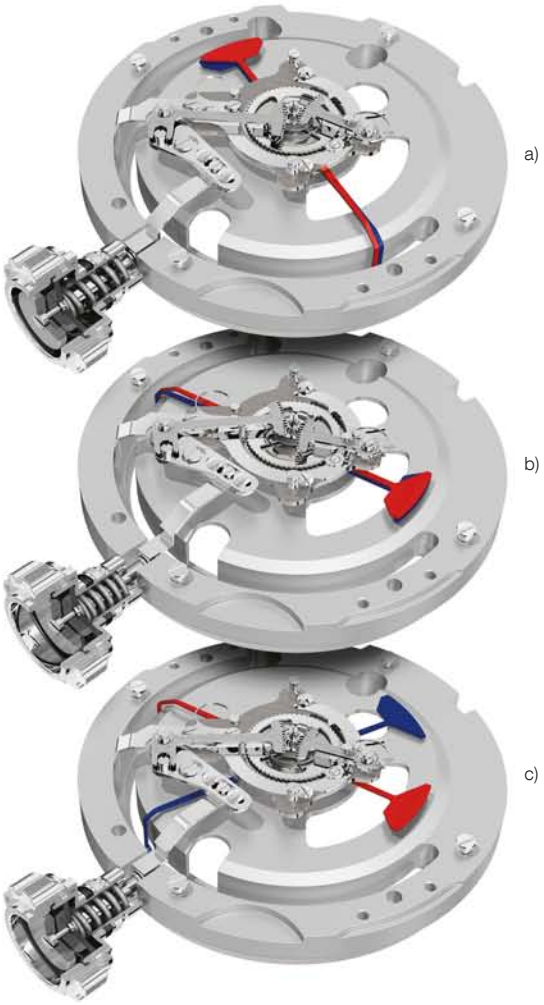
Water-resistance
The water-resistance of IWC watches is shown in bar and not in metres. Metres, which are often used elsewhere in the watch industry to indicate water-resistance, cannot be equated with the dive depth because of the test procedures that are frequently used. By way of explanation: an IWC watch with an indicated water-resistance of 1 bar is protected against superficial water splashes. With water-resistance of 3 bar, the watch can be worn when swimming or skiing, and at 6 bar it will have no problem with water sports or snorkelling. Diver's watches with an indicated water-resistance of 12 to 20 bar are professional measuring instruments designed for scuba-diving. Special diver's watches resistant to 100 bar or, as in the case of the Aquatimer Automatic 2000, 200 bar are suitable even for deep-sea diving.

Top: The glass, case and back cover of the watch offer effective protection against water, dust and other external influences

Depth gauge

With the further-developed depth gauge mechanism, the Aquatimer Deep Two is able to display actual and maximum depths during a dive down to 50 metres. The pressure metering system is housed in a crown on the left-hand side of the case. Water pressure enters the system through miniscule holes in the cover of the depth gauge crown, where it acts upon a spring membrane and pushes a shaft towards the interior of the case. This movement activates a system of levers and, after transmission through a wheel train at the centre of the watch, moves the gauge's two indicators. While the blue indicator moves to show current dive depth, the red one remains at the maximum depth attained in the course of the dive, prevented by a pawl from returning to its original position. The maximum depth indicator can be reset to zero by pressing a button next to the depth gauge crown.

Top: The Aquatimer Deep Two is a professional instrument for divers
Right: The illustration shows the depth gauge mechanism as seen from the movement side, with the dial below



The Aquatimer Deep Two's depth gauge shows current depth and records the maximum depth attained during a dive:
a) during the descent, both hands move to the targeted dive depth
b) the red indicator shows the maximum dive depth (up to 50 metres) and remains in place
c) during the ascent, the movements of the blue indicator are dictated by actual dive depth

Glasses
IWC attaches enormous importance to the suitability of its watches for everyday use. For this reason, the material exclusively used in its current models for front and see-through back covers is sapphire glass. With a hardness grade of 9 on Mohs' scale, it is harder than any other type of glass and topped only by diamond. The glass is made of synthetically manufactured sapphire, which makes it extremely scratch-resistant and less sensitive to impact than quartz (Mohs 7) or apatite (Mohs 5). Sapphire glasses are first ground into shape – many of them convex – and then polished. There are some case designs for which IWC uses domed glasses with a highly arched edge. The antireflective coating reduces glare and gives the wearer a crystal-clear view of the dial or watch movement.

Top: The glass of some Aquatimer watches is up to 3.7 millimetres thick

CHANGING THE BRACELET AT THE TWIST OF A WRIST

Bracelets
The metal bracelet system is based on a sophisticated combination of hinged links and fixing bolts. This mechanism permits wearers to adjust the length of the bracelet themselves simply by adding or removing individual links.

Even more practical is the bracelet quick-change system** for the Aquatimer family. With this, changing from a metal bracelet to a rubber or hook-and-loop strap is fast and effortless: finger pressure releases a catch on the inside of the bracelet. The connecting links are mutually compatible and make an audible click as they engage.

The metal bracelets of the Da Vinci watch family are equipped with a special fine-adjustment mechanism that enables the wearer to slightly alter the length of the strap at any time. All it requires is gentle pressure on the button at the centre of the cover on the clasp and a gentle tug on the bracelet. This compensates for slight variations in wrist girth and makes the watch more comfortable to wear.

*Top: ** The Aquatimer bracelet quick-change system was developed by IWC under a patent license from Cartier*

SIX PIONEERS IN THE HISTORY OF IWC

In 2008, on the occasion of its 140th birthday, IWC took six iconic models from the company's long history and updated them as contemporary reinterpretations, equipped with modern, IWC-manufactured hand-wound and automatic movements. Where fidelity to the historic originals was required, they are fitted with hand-wound pocket watch movements based on IWC's legendary 98 calibre, in production for longer than any other movement. These have been modified to include certain elements from the very earliest Jones movements. The striking dome shape of the front glass on three of the models is likewise reminiscent of the design of the historic originals. Each of the six timepieces is based on the model that inspired one of the company's current families of watches.

In the mid-1930s, IWC's Pilot's Watches ushered in the age of high-performance watches. In the early days of flying, timepieces designed for use in aircraft had to contend with strong vibrations, wildly fluctuating temperatures and magnetic fields. Pilots needed precise, robust wristwatches that would satisfy all these requirements. In 1936, IWC launched its first "IWC Special Pilot's Watch". With its black dial and luminescent hands and numerals, the watch drew unmistakably on highly legible navigating instruments and established the cockpit-style design that has become a standard feature of classical pilot's watches. The rotating bezel with its luminescent arrowhead index helped pilots to set their maximum flying time. Seals made of lead in the stainless-steel case protected the movement, the 83 calibre, against dust.

The first Portuguese watch from IWC, manufactured in 1939, is one of watchmaking's genuine legends. It owes its name and existence to two Portuguese watch importers who approached the company in the late 1930s requesting a wristwatch in a steel case. The watch they had in mind would be as precise as a marine chronometer – a requirement that before then could only have been met by a pocket watch movement. Taking the superb 74-calibre bar movement as a starting point, IWC made a hunter-style wristwatch. The hunter was a natural choice, because its crown – like that of a wristwatch – is located on the right-hand side of the case instead of at the top, as in the case of Lépine open-face pocket watches. As the first pocket-watch style wristwatch, the Portuguese set a precedent for the giant-sized wristwatches that are popular today. And, as the founder of an illustrious IWC watch family, it is one of the more important figures in the company's history.

Right: The historic watch models, clockwise from top: Aquatimer Automatic, 1967; Ingenieur Automatic, 1955; Portuguese, 1939; Da Vinci, Beta 21 calibre, 1969; "IWC Special Pilot's Watch", 1936; centre: Portofino, 1984

In many respects the Ingenieur Automatic, which appeared in 1955, was a quantum leap in watchmaking. The aim was to make a perfectly protected, high-precision watch, wound solely by movements of the wearer's arm. It was achieved in an exemplary fashion with the Pellaton pawl-winding system patented in the early 1950s. In order to conduct magnetic fields around the outside of the watch, the new automatic movement was combined with the case technology used for the Pilot's Watch Mark 11 and housed in an additional soft-iron inner case with a soft-iron dial. It meant that professionals like engineers, technicians and doctors, whose work brought them into contact with magnetic fields, could rely on their watches at all times. Today, the Ingenieur watch family is the epitome of tough, functional watches designed to withstand water, impacts, vibrations and temperature changes.

Man's dream of diving is probably as old as his dream of flying. In the 1960s, a growing fascination with the underwater world spawned an unprecedented number of attempts to explore it systematically. Now it was the job of the watchmaking industry to develop diver's watches that were water-resistant, robust and, above all, reliable; for correctly timing a dive was key to the health – or even the life – of the diver. In 1967, IWC unveiled the Aquatimer. Water-resistant to 20 bar, the company's first diver's watch founded a watch family whose success has continued unabated to this day. One of the critical features from the start was an internal rotating bezel that was set using a second crown situated at "4 o'clock". The rotating bezel on the current Aquatimer models has undergone further development and is now located outside the case.

The story of the Da Vinci family comprises a technological revolution, a major setback and, more recently, a triumph. In the mid-1960s, IWC and other companies developed a quartz wristwatch movement, the Beta 21 calibre or, as IWC called it, the 2001 calibre. It was used in the very first Da Vinci in 1969. Although quartz revolutionised the world of watchmaking, Swiss companies specialised in the manufacture of complex mechanical watches and could do little to combat the cheap, mass-produced articles flooding the market from the East. It was in these circumstances that IWC was drawn increasingly by the fascination of pure mechanics. And the Da Vinci watch generation of 1985 set IWC's mechanical watches on course for a series of world-shattering triumphs.

In the 1970s and early 80s, the market was dominated by complex watches inspired by art and design. Despite this, IWC noted that there was a steady demand for simple, classical models. It resulted in the birth of a watch family that is both timeless and elegant and that has remained the unassuming star of the IWC collection to this day: the Portofino, first unveiled in 1984. The Reference 5251 pocket watch movement, remodelled for use on the wrist, made no attempt to conceal its direct descent from IWC's Lépine open-face pocket watches. On the contrary: a glass back cover provided a clear view of the extremely slim original 9521-calibre pocket watch movement. The very first Portofino owes another special feature to its open-face ancestry: the moon phase and seconds displays are located at "3 o'clock" and "9 o'clock", respectively, because the winding stem and small seconds hand in this type of movement are always in line. The first model, with its yellow gold case and goldstone moon phase display, was produced unchanged in a very small series until the late 1990s.

This year, the platinum and stainless-steel models in the IWC Vintage Collection are joined by further attractive versions in 18-carat white gold and 18-carat rose gold.

Top right: Hand-wound movements from the 98000-calibre family are featured in the IWC Vintage Collection's Pilot's Watch, Portuguese and Portofino models
Top left: Of the IWC Vintage Collection watches, the Ingenieur, Aquatimer and Da Vinci models are equipped with an automatic movement from the 80000-calibre family


IWC
IWC Vintage Collection – Jubilee Edition 1868-2008
Limited Edition 001/140
IWC

SINCE 1936:
THE MOTHER OF ALL IWC PILOT'S WATCHES

The fact that the modern interpretation bears such an uncanny resemblance to the "mother of all IWC Pilot's Watches" is no coincidence: the classical cockpit-like look of the design, with its luminescent hands and numerals and black dial, has remained unchanged to this day. From a technical point of view, the Pilot's Watch Hand-Wound, with its rotating bezel and arrowhead index, represents the state of the art. Instead of the original 83 calibre, the new version from the IWC Vintage Collection features a pocket watch movement from the 98000-calibre family – hand-wound with a large screw balance and Breguet spring. The basic calibre stems from the 1930s and has been series-produced for longer than most other IWC movements. Through the see-through sapphire-glass back, you can see two technical features reminiscent of the first Jones calibre of 1868: the decorated nickel-silver three-quarter bridge and the Jones arrow. The elongated index served IWC's founder as a means of adjusting the balance's oscillating frequency and has remained a hallmark of Jones watches to this day.

Top: In the early days of aviation, pilots and technology were tested to the limit

PILOT'S WATCH HAND-WOUND
REFERENCE 3254

Reference IW325405
in platinum with black
calfskin strap

Features
Limited edition of 500 watches in platinum | Mechanical movement | Hand-wound | 46-hour power reserve when fully wound | Small seconds | Breguet spring | Sapphire glass, convex, antireflective coating on both sides | See-through sapphire-glass back | Water-resistant 6 bar | Case height 12 mm | Diameter 44 mm

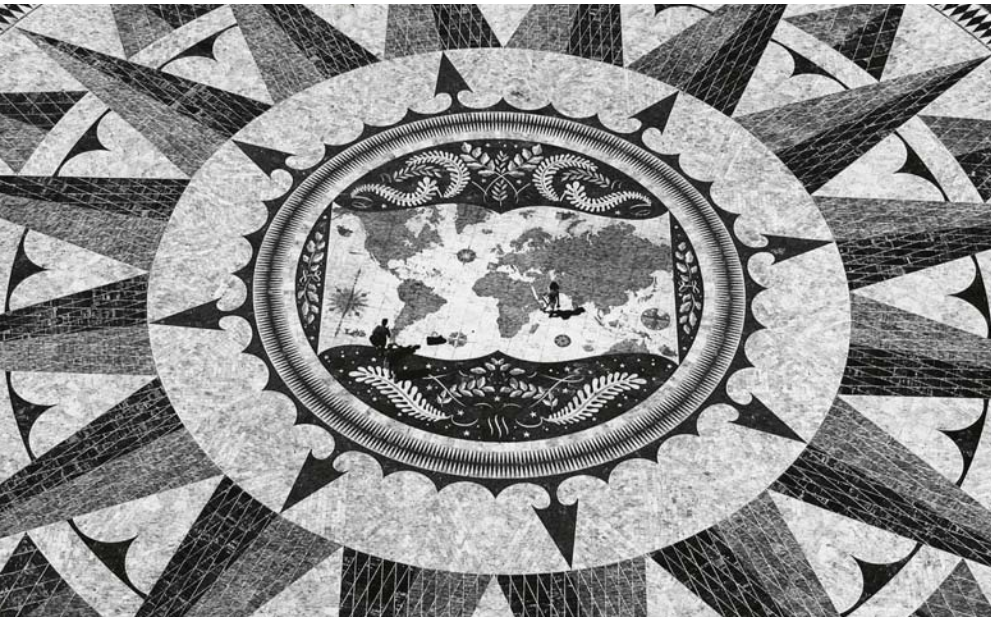
PILOT'S WATCH HAND-WOUND
REFERENCE 3254

Reference IW325404
in 18-carat white gold with
brown calfskin strap

Reference IW325403
in 18-carat rose gold with
brown calfskin strap

Reference IW325401
in stainless steel with
brown calfskin strap

Features
Mechanical movement | Hand-wound | 46-hour power reserve when fully wound | Small seconds | Breguet spring | Sapphire glass, convex, antireflective coating on both sides | See-through sapphire-glass back | Water-resistant 6 bar | Case height 12 mm | Diameter 44 mm



SINCE 1939: A LARGER-THAN-LIFE LEGEND

For the Portuguese Hand-Wound, IWC chose one of the original dials from 1939 that had not been seen in this form for a long time: it features alternating Arabic numerals and markers, while an additional circle separates the centre of the dial. The chapter ring and the seconds display circle are in the “chemin de fer” – railway track – design highly popular at the time. Modelled on the style of the good old pocket watch and the original Portuguese, the front glass has an arched edge. The shape, too, of the imposing 44-millimetre case, with its grooved bezel and slightly recessed strap horns, is based on the historic original. The technology, on the other hand, could not be more modern. The 98295 calibre is also used in the Portuguese Hand-Wound: with a frequency of 2.5 hertz, it features a large screw balance, Breguet spring and nickel-plated nickel-silver three-quarter bridge as well as bridges decorated with circular graining and Geneva stripes. The see-through sapphire-glass back provides an unimpeded view of the index, which reaches from the balance cock to the plate.

Top: This artistically arranged mosaic is a reference to Portugal’s history as a leading nation of seafarers

PORTUGUESE HAND-WOUND
REFERENCE 5445

Reference IW544505
in platinum with black
alligator leather strap

Features
Limited edition of 500 watches in platinum | Mechanical movement | Hand-wound | 46-hour power reserve when fully wound | Small seconds | Breguet spring | Sapphire glass, arched edge, antireflective coating on both sides | See-through sapphire-glass back | Water-resistant 3 bar | Case height 10 mm | Diameter 44 mm

PORTUGUESE HAND-WOUND
REFERENCE 5445

Reference IW544504
in 18-carat white gold with dark brown alligator leather strap

Reference IW544503
in 18-carat rose gold with brown alligator leather strap

Reference IW544501
in stainless steel with black alligator leather strap

Features
Mechanical movement | Hand-wound | 46-hour power reserve when fully wound | Small seconds | Breguet spring | Sapphire glass, arched edge, antireflective coating on both sides | See-through sapphire-glass back | Water-resistant 3 bar | Case height 10 mm | Diameter 44 mm

SINCE 1955: SAFEKEEPING PRECISION TECHNOLOGY

If the 8521 calibre in the first Ingenieur was a byword for ruggedness and reliability – and created a furore among watch lovers – the 80000-calibre family with Pellaton winding and integrated shock-absorption system is its natural development. This ultra-precise and robust mechanism is also the driving force behind the Ingenieur Automatic in the IWC Vintage Collection. Under the antireflective, arched-edge sapphire glass encircled by the 42.5-millimetre case is a superbly reduced dial with dot-and-line markers – the dot is luminescent – and dauphine hands. The modern version of this monument in the history of watchmaking omits the soft-iron case featured in the historic original but does provide an impressive view of the IWC-manufactured movement. Thanks to a screw-in crown, the Ingenieur Automatic is water-resistant to 12 bar and equipped to meet all the exacting demands of modern-day life.

Top: In everyday use and extreme situations, the Ingenieur Automatic is a reliable companion

INGENIEUR AUTOMATIC
REFERENCE 3233

Reference IW323305
in platinum with black alligator leather strap

Features
Limited edition of 500 watches in platinum | Mechanical movement | Pellaton automatic winding | 44-hour power reserve when fully wound | Date display | Central seconds | Screw-in crown | Sapphire glass, arched edge, antireflective coating on both sides | See-through sapphire-glass back | Water-resistant 12 bar | Case height 14.5 mm | Diameter 42.5 mm

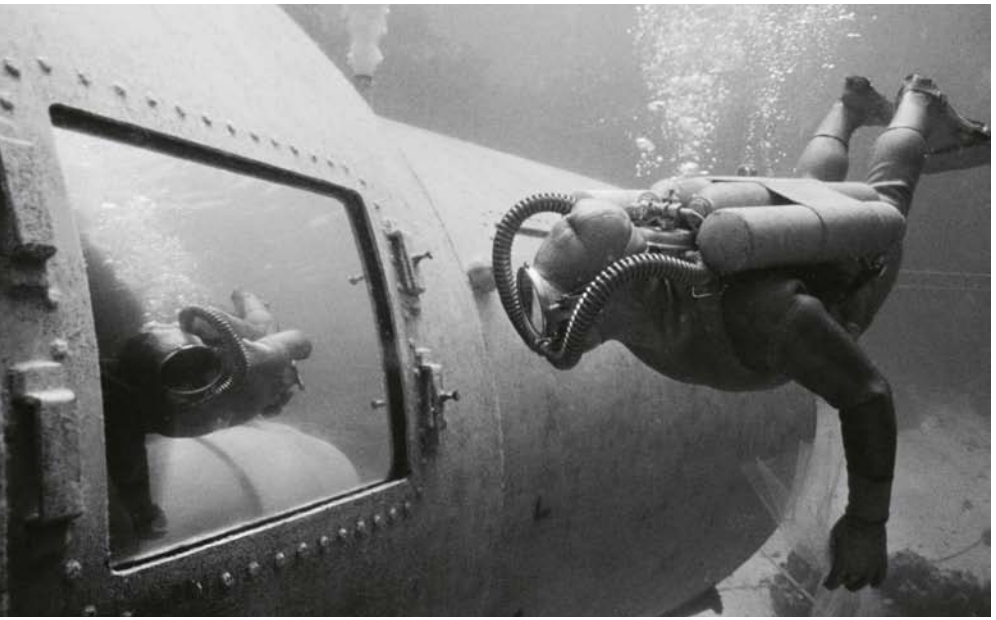
INGENIEUR AUTOMATIC
REFERENCE 3233

Reference IW323304
in 18-carat white gold with dark brown alligator leather strap

Reference IW323303
in 18-carat rose gold with brown alligator leather strap

Reference IW323301
in stainless steel with black alligator leather strap

Features
Mechanical movement | Pellaton automatic winding | 44-hour power reserve when fully wound | Date display | Central seconds | Screw-in crown | Sapphire glass, arched edge, antireflective coating on both sides | See-through sapphire-glass back | Water-resistant 12 bar | Case height 14.5 mm | Diameter 42.5 mm



SINCE 1967: CONQUERING THE SEVEN SEAS

The clear-cut dial design of the Aquatimer Automatic mirrors that of the first Aquatimer series except that the 44-millimetre case makes it even more legible. The Aquatimer Automatic is, of course, ideally suited to the needs of ambitious divers. The watch features a screw-in main crown together with a crown for setting the internal rotating bezel. To facilitate use, this second crown does not screw in. Like the 1967 model, which featured the 8541-calibre automatic movement – then the most rugged available – the Aquatimer Automatic of today has the same movement as the Ingenieur watch family, the IWC-manufactured 80111 calibre. Unlike its historic forebear, however, it has a see-through sapphire-glass back that in no way detracts from its water-resistance to 12 bar.

Top: Since the 1960s, IWC's Aquatimer models have been accompanying divers on their fascinating forays of discovery into the underwater world

AQUATIMER AUTOMATIC
REFERENCE 3231

Reference IW323105
in platinum with black alligator leather strap

Features
Limited edition of 500 watches in platinum | Mechanical movement | Pellaton automatic winding | 44-hour power reserve when fully wound | Date display | Central seconds | Mechanical internal rotating bezel | Screw-in main crown | Sapphire glass, convex, antireflective coating on both sides | See-through sapphire-glass back | Water-resistant 12 bar | Case height 14.5 mm | Diameter 44 mm

AQUATIMER AUTOMATIC
REFERENCE 3231

Reference IW323104
in 18-carat white gold with dark brown alligator leather strap

Reference IW323103
in 18-carat rose gold with brown alligator leather strap

Reference IW323101
in stainless steel with black rubber strap

Features
Mechanical movement | Pellaton automatic winding | 44-hour power reserve when fully wound | Date display | Central seconds | Mechanical internal rotating bezel | Screw-in main crown | Sapphire glass, convex, antireflective coating on both sides | See-through sapphire-glass back | Water-resistant 12 bar | Case height 14.5 mm | Diameter 44 mm

SINCE 1969: MASTERPIECES FROM SCHAFFHAUSEN

The historic original Da Vinci of 1969 came in a striking angular case with extra-long hour markers and simple baton hands, a singular piece of design history and a prime example of the avant-garde shapes that marked the period. Today, its uncompromisingly straight and instantly recognisable lines unequivocally underscore the watch's modernity. Unlike that first Da Vinci, however, which will forever be associated with the quartz wristwatch movement, the Da Vinci Automatic comes with a modern, IWC-manufactured 80111 calibre featuring Pellaton automatic winding. A glance at the dial might make you think time had stood still, but a peek through the sapphire-glass back will quickly persuade you otherwise.

Top: The dial's design reflects the spirit of the age; the picture depicts the 15th-century Prague Astronomical Clock on the Old Town City Hall

DA VINCI AUTOMATIC
REFERENCE 5461

Reference IW546105
in platinum with black
alligator leather strap

Features
Limited edition of 500 watches in platinum | Mechanical movement | Pellaton automatic winding | 44-hour power reserve when fully wound | Date display | Central seconds | Screw-in crown | Sapphire glass, convex, antireflective coating on both sides | See-through sapphire-glass back | Water-resistant 3 bar | Case height 13.5 mm | Diameter 41 mm

DA VINCI AUTOMATIC
REFERENCE 5461

Reference IW546104
in 18-carat white gold with dark
brown alligator leather strap

Reference IW546103
in 18-carat rose gold with dark
brown alligator leather strap

Reference IW546101
in stainless steel with black
alligator leather strap

Features
Mechanical movement | Pellaton automatic winding | 44-hour power reserve when fully wound | Date display | Central seconds | Screw-in crown | Sapphire glass, convex, antireflective coating on both sides | See-through sapphire-glass back | Water-resistant 3 bar | Case height 13.5 mm | Diameter 41 mm

SINCE 1984: EXTRAVAGANCE IN SIMPLICITY

With its narrow Roman numerals and moon phase display, the Portofino Hand-Wound exudes the same timeless elegance as the historic original did 25 years ago, and has made use of its renaissance to correct a “flaw” – albeit a rather becoming one: the choice of the 98800-calibre hunter movement means that the moon phase and seconds displays are now back at their conventional positions of “12 o’clock” and “6 o’clock”, respectively. The movement, which is based on the Jones calibre and features a nickel-plated nickel-silver three-quarter bridge, screw balance, Breguet spring and elongated index, has also undergone a modification: the accuracy of the moon phase display has been improved to the extent that it deviates by just 1 day in 122 years from the actual progress of the moon. In addition, the moon phase can easily be corrected using just the crown. The imposing 46-millimetre case remains unchanged. With its sapphire glass – sharply arched at the edge like the historic original – and sapphire-glass back, this superb example of a typical IWC pocket-watch style wristwatch can now be viewed from all sides.

Top: The picturesque port town on the rocky Ligurian coast stands for timeless beauty and cosmopolitan elegance

PORTOFINO HAND-WOUND
REFERENCE 5448

Reference IW544805
in platinum with black
alligator leather strap

Features
Limited edition of 500 watches in platinum | Mechanical movement | Hand-wound | 46-hour power reserve when fully wound | Moon phase display at 12 o’clock | Small seconds | Breguet spring | Sapphire glass, arched edge, antireflective coating on both sides | See-through sapphire-glass back | Water-resistant 3 bar | Case height 11 mm | Diameter 46 mm

PORTOFINO HAND-WOUND
REFERENCE 5448

Reference IW544804
in 18-carat white gold with dark brown alligator leather strap

Reference IW544803
in 18-carat rose gold with brown alligator leather strap

Reference IW544801
in stainless steel with black alligator leather strap

Features
Mechanical movement | Hand-wound | 46-hour power reserve when fully wound | Moon phase display at 12 o'clock | Small seconds | Breguet spring | Sapphire glass, arched edge, antireflective coating on both sides | See-through sapphire-glass back | Water-resistant 3 bar | Case height 11 mm | Diameter 46 mm


IWC
SCHAFFHAUSEN
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agitato

BEYOND ALL TIME

The Grande Complication is, without doubt, a watchmaking sensation. In watchmaking, the name has been used since time immemorial for only the most complex of all wristwatches. With good reason. Beating away at the heart of the watch, at a constant, even rate, is the result of 50,000 hours of development by some of the world's most qualified watchmakers. The creation of the first wristwatch-size, series-produced Grande Complication took no fewer than seven years. IWC's watchmakers distilled all the know-how and experience gained in a century of manufacturing watches to make, among other things, the precise calculations and highly sophisticated mechanics required to master the complexities of the leap years. The scale of their achievement in converting and transmitting the mechanism's movements is perhaps best illustrated by the century slide: the balance completes more than 12.5 billion oscillations before the century disc moves once. The moon phase display, too, is Haute Horlogerie for connoisseurs. It measures the time from one full moon to the next to an accuracy previously unequalled in a wristwatch: exactly 29.53050 days.

The crowning glory of the complications is the adapted minute repeater, which chimes out the time to an accuracy of one minute on command. The repeating mechanism alone comprises 250 individual parts and is powered by a separate system of springs, while the other 21 displays and functions take the energy they need automatically from movements of the wearer's wrist. For the watch's complex main movement, only the best was good enough: 75 functional rubies, an unbreakable Nivaflex®* mainspring, a top-quality Glucydur®* beryllium alloy balance and a winding rotor made of gold. Before assembly, many parts of the movement are manually polished, chamfered to an angle of 45 degrees and, where appropriate, decorated. In the end, it has all been worth it: the countless hours invested, the passion for consummate craftsmanship and the quest for perfection. Even today, the Grande Complication is one of the most complex wristwatches in the world, and at the same time, one of the easiest to operate.

Top: Some of the 659 mechanical parts required for the Grande Complication's 21 displays and functions
Left: The first Grande Complication, launched in 1990


IWC
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ONE OF THE WORLD'S MOST DEMANDING WRISTWATCHES

Its vital statistics are as follows: 659 mechanical parts, together with 21 functions and displays, including a perpetual calendar for the next 500 years and a perpetual moon phase display made of polished goldstone (cf. page 24 et seq), representing a star-studded midnight-blue sky. Working inside the Grande Complication are a chronograph and a highly complex minute repeater strike train with an all-or-nothing piece (cf. page 28). This elaborate piece of mechanics chimes out the time in crystal-clear tones, which are activated by a repeating slide on the left-hand side of the case. Two tiny, precision-made hammers are released and strike the time in hours, quarters and minutes on two gongs. The strike train is a technical tour de force. Initially, the chimes were inaudible outside the solid platinum case, so the glass was freely suspended on a platinum membrane to enable it to amplify the vibrations produced by the gongs via the sound transmission pin. The case, too, finished in solid platinum with a fineness of 95 percent or 18-carat rose gold, is first-class.

Top: The assembly of the movement calls for extreme precision and delicacy of touch

GRANDE COMPLICATION REFERENCE 3770/9270

Reference IW377013
in platinum with black alligator leather strap

Reference IW927016
in platinum with platinum bracelet

Features
Limited edition of 50 watches per year | Mechanical movement | Self-winding | 44-hour power reserve when fully wound | Chronograph | Minute repeater | Perpetual calendar with crown-activated rapid advance | Four-digit year display | Perpetual moon phase display | 659 mechanical parts | Screw-in crown | Sapphire glass, convex, antireflective coating on both sides | Case height 16.3 mm | Diameter 42.2 mm

GRANDE COMPLICATION
REFERENCE 3770/9270

Reference IW377017
in platinum with black
alligator leather strap

Reference IW927020
in platinum with platinum
bracelet

Reference IW377025
in 18-carat rose gold with black
alligator leather strap

Reference IW927045
in 18-carat rose gold with
18-carat rose gold bracelet

Features
Limited edition of 50 watches per year | Mechanical movement | Self-winding | 44-hour power reserve when fully wound | Chronograph | Minute repeater | Perpetual calendar with crown-activated rapid advance | Four-digit year display | Perpetual moon phase display | 659 mechanical parts | Screw-in crown | Sapphire glass, convex, antireflective coating on both sides | Case height 16.3 mm | Diameter 42.2 mm

PORTUGUESE ON PRECISION COURSE TO SUCCESS

"Heroes of the sea, noble people …" is the opening line of the Portuguese national anthem. It is the expression of a collective memory through which Portugal's great seafarers – Vasco da Gama, Bartolomeu Dias or Ferdinand Magellan – remain alive to this day. Above all, it was their outstanding sailing skills, their precise nautical charts and the use of instruments such as the astrolabe and Jacob's staff to determine their latitude on the high seas that enabled them to embark on their daredevil voyages of discovery to West Africa and across the world's oceans. The pioneers of Portuguese seafaring managed to reconcile seemingly incompatible opposites: their hot-blooded temperament with cool calculation; outstanding courage with respect for natural forces; and historical tradition with all that was new in science and technology. The Portuguese watches from IWC are a distant echo from that glorious past. They combine the tradition of nautical instruments with contemporary design and forward-looking mechanics.

More than 500 years later, at the end of the 1930s, two Portuguese businessmen with interests in the watch industry were searching for technical precision of the highest order and paid a visit to the factory in Schaffhausen. They ordered wristwatches in steel cases with the accuracy of a marine chronometer. At the time, the only way of meeting their request was with a pocket watch movement, so IWC decided to take one from a hunter movement (which has the crown on the right-hand side anyway) and house it in a wristwatch case. The first Portuguese of 1939 established an IWC watch family whose precision, sheer size and complex mechanics have been a source of pleasure to watch enthusiasts the world over for more than 70 years.

At the Basel Watch Show in 1967, IWC presented the Yacht Club Automatic, a superbly crafted men's wristwatch that was perfectly suited to the hardships of life on stormy seas. Its movement was spring-suspended and mounted on rubber buffers, making it doubly resistant to shocks. This meant that the 8541 calibre was able to move in response to impacts, thus neutralising any knocks or bangs. The steel model was water-resistant to 10 bar, the gold version to 6 bar. Exclusive, rugged and ideal for everyday use: small wonder the Yacht Club became one of the best-selling IWC watches of all time.

To mark its 125th anniversary in 1993, the Schaffhausen-based company reincarnated the striking Portuguese watch after 50 years with a special limited edition. The 9828 calibre featured in the anniversary Portuguese model was based on the legendary 98-calibre pocket watch movement and, for the first time, could be seen from the back through its sapphire-glass cover.

In 2000, after 5 years of development, IWC unveiled the Portuguese Automatic with the IWC-manufactured 5000 calibre. It was an exciting combination of traditional and new IWC technology. Among other things, the drive of the markedly sized IWC pocket watch movement incorporates bidirectional Pellaton winding and a balance with a Breguet spring for maximum precision. The newly designed 7-day movement with its power reserve display was a gigantic technological leap in the history of the automatic movement.

Top: For 300 years, sailors have determined distances and their position on the high seas with the help of a sextant
Left: The original Portuguese, here a model made in 1944, with its 98-calibre hunter pocket watch movement

The Portuguese Perpetual Calendar of 2003, which featured the newly developed perpetual calendar mechanism, was further proof of IWC innovation at its best. In 2005, the limited Portuguese F.A. Jones Hand-Wound was launched as a classic memorial to the Schaffhausen-based company's founder. The watch combined authenticity and tradition down to the last tiny detail. By 2007, the Portuguese watch family had already welcomed several prominent representatives of the world of Haute Horlogerie to its circle (including the perpetual calendar, the minute repeater and the flying tourbillon). At this point they were joined by another extravagant example of first-class watchmaking: a regulateur with separate hour, minute and seconds displays. In 2008, a Portuguese Hand-Wound was launched as part of the IWC Vintage Collection. With its railway track-style chapter ring and arched-edge front glass, the watch bore a striking resemblance to the 1939 original but, from a technical point of view, was state-of-the-art.

Top: Classical navigation using a chart, dividers and compass is one of the traditional skills any skipper should still master

In 2010, IWC is celebrating another “Portuguese” year with a wealth of fascinating new products. Leading the way is the flagship of the collection, the Grande Complication, now for the first time in a Portuguese case. The Portuguese Tourbillon Mystère Rétrograde combines the magic of a floating tourbillon with the logic of a date hand that reverts to its starting position. Featuring echoes of earlier styles, the Portuguese Hand-Wound bridges the gap between the original Portuguese and the present, while the new Portuguese Yacht Club Chronograph is the first model to bring a sporting note into the family. All the timepieces in the new Portuguese line have one thing in common: they are precision navigation instruments designed for everyday use in today’s world.

Top: Maritime expertise and state-of-the-art technology keep ocean-going yachts firmly on course


IWC
SCHAFFHAUSEN
YACHT CLUB
SWISS MADE
25

A BEACON OF HAUTE HORLOGERIE

Vasco da Gama's flagship was a nau dubbed the São Gabriel; the new flagship of the most celebrated watch family from IWC is the Portuguese Grande Complication. Only the best-qualified helmsmen and navigators of their day were good enough to accompany da Gama's fleet; in much the same way, the Portuguese Grande Complication, which is water-resistant to 3 bar, unites a wealth of watchmaking's most outstanding achievements in its 45-millimetre red gold case. These include a perpetual calendar that is mechanically programmed until 2499 (it requires just three adjustments in the non-leap years 2100, 2200 and 2300) as well as a perpetual moon phase display and chronograph. When activated by the slide, the minute repeater chimes out the time precisely in harmonious tones. A globe of the world discreetly engraved with lines of latitude and longitude provides a background to the silver-coloured dial with its solid red gold appliqués. On the back cover, an intricate engraving of a sextant – an indispensable aid to marine navigation along with the watch – is an unmistakable sign that the watch is part of the Portuguese watch family. The strap is stitched with 18-carat red gold thread.

Top: With major watchmaking complications such as a minute repeater, perpetual calendar and perpetual moon phase, the Portuguese Grande Complication is bound to impress

PORTUGUESE GRANDE COMPLICATION
REFERENCE 3774

Reference IW377402
in 18-carat red gold with dark brown alligator leather strap

Features
Limited edition of 50 watches per year | Mechanical chronograph movement | Self-winding | 44-hour power reserve when fully wound | Perpetual calendar with displays for the date, day, month, year in four digits and perpetual moon phase | Stopwatch function with hours, minutes and seconds | Minute repeater for hours, quarters and minutes | Small hacking seconds | Sapphire glass, arched edge, anti-reflective coating on both sides| Special back engraving | Water-resistant 3 bar | Case height 16.5 mm | Diameter 45 mm

A MARRIAGE OF MYSTERY AND GLAMOUR

With an appearance as magical as it is distinctive, the Portuguese Tourbillon Mystère Rétrograde is guaranteed to attract inquisitive glances. Watch lovers will be particularly fascinated by the unusual arrangement of the flying tourbillon, consisting of 81 parts, against a deep black background, creating the illusion that the filigree cage containing the balance is rotating in mid-air. Set in a mirror-finished ring, it resembles an animated “12” and forms the optical centrepiece of the entire dial. The retrograde date display is not only an original complication but also makes a good deal of sense, because a conventional date disc would conceal the tourbillon. After the 31st of the month, it automatically jumps back to the 1st; in shorter months, the hand can be rapidly advanced until it reverts to the 1st. On the right-hand side of the dial, the 7-day power reserve display indicates how much energy remains in the IWC-manufactured 51900 calibre. As befitting a timepiece of this quality, the Portuguese Tourbillon Mystère Rétrograde premieres in a glamorous red gold case with a silver-coloured dial and in platinum with a dial in ruthenium black.

Top: At the end of the month, the hand in the retrograde date display automatically jumps back to its starting position

PORTUGUESE TOURBILLON MYSTÈRE RÉTROGRADE REFERENCE 5044

Reference IW504401
in platinum with black alligator leather strap

Reference IW504402
in 18-carat red gold with dark brown alligator leather strap

Features
Limited edition of 250 watches in platinum and 500 watches in 18-carat red gold | Mechanical movement | Pellaton automatic winding | 7-day power reserve when fully wound | Power reserve display | Retrograde date display | Minute tourbillon | Breguet spring | Rotor with 18-carat yellow gold medallion | Sapphire glass, convex, antireflective coating on both sides | See-through sapphire-glass back | Water-resistant 3 bar | Case height 15.5 mm | Diameter 44.2 mm

A MOVING PERFORMANCE AT “9 O’CLOCK”

In the new Portuguese Tourbillon Hand-Wound, the “whirlwind” – as the word translates – revolves on its axis at “9 o’clock” on the dial; or, in nautical terms, at 270 degrees west. The sight of the mechanical, cantilever-mounted minute tourbillon revolving around its own axis invariably attracts rapt attention from watch lovers. Gracing the dial on the opposite side, at “3 o’clock”, is the flowing signature of company founder F. A. Jones. Watch cognoscenti will be unable to resist the temptation to cast a glance through the transparent sapphire-glass back, where they will see the IWC-manufactured 98900-calibre movement with its intricately decorated, nickel-plated three-quarter bridge made of nickel silver. It belongs in the long tradition of the 98 calibre, which was first designed for hunter pocket watches in the 1930s and has since been continuously improved. For this model, IWC’s engineers increased the balance frequency to 28,800 beats per hour, which guarantees excellent precision. As you would expect of such a desirable timepiece, this gem in 18-carat red gold is strictly limited to 500 watches.

Top: The tourbillon cage rotates on its own axis once a minute; the flowing signature is a reference to company founder F. A. Jones

PORTUGUESE TOURBILLON HAND-WOUND REFERENCE 5447

Reference IW544705
in 18-carat red gold with black alligator leather strap

Features
Limited edition of 500 watches in 18-carat red gold | Mechanical movement | Hand-wound | 54-hour power reserve when fully wound | Flying minute tourbillon at 9 o’clock | Small seconds at 6 o’clock | Three-quarter bridge | Sapphire glass, convex, antireflective coating on both sides | See-through sapphire-glass back | Water-resistant 3 bar | Case height 11 mm | Diameter 43.1 mm

A WATCH THAT CHIMES OUT THE TIME

For Portuguese explorers out on the open sea, timekeeping was of crucial importance. Using a log line together with a special sandglass – the log glass – they were able to measure the vessel's speed. The ship's bell clock, on the other hand, was used to signal the beginning and end of sailors' watches: the bell would be struck once every half-hour and twice every full hour, with 4 double strikes signalling the end of a watch. The abstract concept of time was thus being converted into acoustic tones even back then. In the Portuguese Minute Repeater, depressing the slide causes a delicate strike train to sound the time out audibly in hours, quarters and minutes. In 2009, the case was increased by 1.7 millimetres in height and 1 millimetre in diameter, but in a move destined to appeal to fans of classic dial design, the small seconds display was shifted from "9 o'clock" to "6 o'clock". To achieve this, the original 95-calibre Lépine open-face movement was replaced by a 98950-calibre hunter pocket watch movement and some of the stylish elements of the early Jones calibres were adopted. A number of these, such as the elongated index, the balance with its high-precision adjustment cam and the distinctively decorated nickel-silver plate and bridge with gold-plated engravings, can be seen through the transparent sapphire-glass back. Both versions are limited to 500 watches.

Top: When the meticulously crafted repeating slide is depressed, the minute repeater melodiously chimes out the time on the gongs in hours, quarters and minutes

PORTUGUESE MINUTE REPEATER
REFERENCE 5449

Reference IW544901
in platinum with black
alligator leather strap

Reference IW544905
in 18-carat red gold with brown
alligator leather strap

Features
Limited edition of 500 watches each in platinum and 18-carat red gold | Mechanical movement | Hand-wound | 46-hour power reserve when fully wound | Minute repeater for hours, quarters and minutes | Glucydur®* beryllium alloy balance with high-precision adjustment cam on balance arms | Breguet spring | Three-quarter bridge | Sapphire glass, arched edge, antireflective coating on both sides | See-through sapphire-glass back | Case height 14 mm | Diameter 44 mm

COUNTDOWN TO THE NEXT FULL MOON

The moon was useful to sailors on the open sea not only for navigational purposes. Its influence on coastal tides has always been of greater importance, because the timing of their ebb and flow is reliably dictated by the moon: at new and full moon, high tides are exceptionally high and low tides exceptionally low. In the English Channel the difference can be up to 11.5 metres and in the Gulf of Maine as much as 21 metres, which illustrates the enormous importance of the moon for shipping. Aside from the date, day, month and year in four digits, the Portuguese Perpetual Calendar also indicates the number of days remaining until the next full moon. The display showing its course and featuring mirror images of the moon in the northern and southern hemispheres deviates from the moon's actual progress by just 12 seconds in one lunar period. The striking colour combination found in the new version in white gold will increase its attraction to watch lovers and stargazers: the rhodium-plated moon-phase indicator discs wax and wane thanks to a midnight-blue cut-out display in a dial also finished in midnight blue. In the model with the red gold case, the warm tone provides a pleasing contrast to the black dial.

Top: The dial shows the date, day, month and year in four digits as well as the moon phase with a countdown display for the number of days remaining until the next full moon

PORTUGUESE PERPETUAL CALENDAR REFERENCE 5021

Reference IW502121
in 18-carat white gold with black alligator leather strap

Reference IW502122
in 18-carat red gold with dark brown alligator leather strap

Features
Mechanical movement | Pellaton automatic winding | 7-day power reserve when fully wound | Power reserve display | Perpetual calendar with displays for the date, day, month, year in four digits and perpetual moon phase | Small hacking seconds | Breguet spring | Rotor with 18-carat yellow gold medallion | Sapphire glass, convex, antireflective coating on both sides | See-through sapphire-glass back | Water-resistant 3 bar | Case height 15.5 mm | Diameter 44.2 mm

CELESTIAL BALLET, PERFECTLY CHOREOGRAPHED

The moon phase display on the Portuguese Perpetual Calendar, Reference 5023, is grand-scale theatre on a tiny stage. Attended by a cluster of embossed stars, the moon rises behind the hemispherical cut-out on the left and waxes to full moon in the centre, before disappearing on the right-hand side. IWC's design engineers have calculated that the moon phase display deviates from the duration of the moon's actual course by just 1 day in 577.5 years. No one has so far noticed the difference. In other respects, this elegant, up-to-the-minute timepiece leaves virtually no wish unfulfilled: perpetual calendar, four-digit year display, and a 7-day automatic movement with Pellaton winding and power reserve display. Reference 5023 is available in two versions: in a red gold case with silver-coloured dial and red-gold-plated moon against a midnight blue background; or slightly more restrained, in white gold with rhodium-plated appliqués on a slate-coloured dial with a sun-pattern finish. As in the sister models (Reference 5021), the cases now measure 44.2 millimetres in diameter.

Top: The moon phase display deviates from the duration of the moon's actual course by just 1 day in 577.5 years

PORTUGUESE PERPETUAL CALENDAR REFERENCE 5023

Reference IW502303
in 18-carat white gold with dark brown alligator leather strap

Reference IW502302
in 18-carat red gold with dark brown alligator leather strap

Features
Mechanical movement | Pellaton automatic winding | 7-day power reserve when fully wound | Power reserve display | Perpetual calendar with displays for the date, day, month, year in four digits and perpetual moon phase | Small hacking seconds | Breguet spring | Rotor with 18-carat yellow gold medallion | Sapphire glass, convex, antireflective coating on both sides | See-through sapphire-glass back | Water-resistant 3 bar | Case height 15.5 mm | Diameter 44.2 mm

THE STAR OF THE CREW

The name of the new Portuguese Yacht Club Chronograph harks back to the legendary Yacht Club Automatic of the 1960s and 70s, an ocean-going watch so exclusive that it became one of IWC's most successful watches ever. The Portuguese Yacht Club Chronograph has all the precision of a nautical instrument in its genes and boasts a wealth of advanced technical features. Powered by the rugged IWC-manufactured 89360-calibre movement and water-resistant to 6 bar, the chronograph is geared for competition use with a flyback function, an additional flange with quarter-second calibration for recording short periods of time and an analogue display for longer stop times on a subdial. The Portuguese Yacht Club Chronograph is the only Portuguese model to feature crown protection along with luminescent hands and indices. It is available in stainless steel with a black or silver-coloured dial and in red gold with a slate-coloured dial and black totalisers. It is supplied with a rubber strap, making it the perfect companion for water sports of all kinds.

Top: The new Portuguese Yacht Club Chronograph has all the precision of a nautical instrument in its genes

PORTUGUESE YACHT CLUB CHRONOGRAPH REFERENCE 3902

Reference IW390202
in 18-carat red gold with
black rubber strap

Features
Mechanical chronograph movement | Self-winding | 68-hour power reserve when fully wound | Date display | Stopwatch function with hours, minutes and seconds | Hour and minute counters combined in a single totaliser at 12 o'clock | Flyback function | Small hacking seconds | Screw-in crown | Sapphire glass, convex, antireflective coating on both sides | See-through sapphire-glass back | Water-resistant 6 bar | Case height 14.5 mm | Diameter 45.4 mm

PORTUGUESE YACHT CLUB CHRONOGRAPH
REFERENCE 3902

Reference IW390206
in stainless steel with
black rubber strap

Reference IW390204
in stainless steel with
black rubber strap

Features
Mechanical chronograph movement | Self-winding | 68-hour power reserve when fully wound | Date display | Stopwatch function with hours, minutes and seconds | Hour and minute counters combined in a single totaliser at 12 o'clock | Flyback function | Small hacking seconds | Screw-in crown | Sapphire glass, convex, antireflective coating on both sides | See-through sapphire-glass back | Water-resistant 6 bar | Case height 14.5 mm | Diameter 45.4 mm

ZEITGEIST COMBINED WITH TRADITION

Since its debut in 2004, the Portuguese Automatic with date display has become one of the most successful Portuguese models ever to leave Schaffhausen. The balanced design of the dial with its appliquéd Arabic numerals, railway track-style chapter ring and slender feuille hands retains the classic appeal of the legendary original Portuguese, first manufactured in the 1930s. Its spiritual roots reach all the way back to the voyages of discovery undertaken by the Portuguese seafarers. The voluminous IWC-manufactured 51011 calibre integrates all the finest features ever to grace an automatic movement, such as highly efficient Pellaton winding and a 7-day power reserve. This year, for the first time ever, the Portuguese Automatic's 42.3-millimetre case is available in warm-toned, 18-carat red gold. The appliqués on the silver-plated dial are likewise made of red gold. In a second new departure, the steel model with its silver-plated dial (as in the earlier steel versions) features rose-gold-plated hands, numerals and hour markers: luxury befitting of a watch model so much in demand. The Portuguese Automatic in 18-carat white gold and the other steel models remain in the collection.

Top: Railway track-style chapter ring, feuille hands and appliquéd Arabic numerals imbue the dial with the classical appeal of the first Portuguese watches

PORTUGUESE AUTOMATIC
REFERENCE 5001

Reference IW500106
in 18-carat white gold with dark brown alligator leather strap

Features
Mechanical movement | Pellaton automatic winding | 7-day power reserve when fully wound | Power reserve display | Date display | Small hacking seconds at 9 o'clock | Breguet spring | Rotor with 18-carat yellow gold medallion | Sapphire glass, convex, antireflective coating on both sides | See-through sapphire-glass back | Water-resistant 3 bar | Case height 14 mm | Diameter 42.3 mm

PORTUGUESE AUTOMATIC
REFERENCE 5001

Reference IW500113
in 18-carat red gold with dark brown alligator leather strap

Reference IW500114
in stainless steel with black alligator leather strap

Reference IW500107
in stainless steel with blue alligator leather strap

Reference IW500109
in stainless steel with black alligator leather strap

Features
Mechanical movement | Pellaton automatic winding | 7-day power reserve when fully wound | Power reserve display | Date display | Small hacking seconds at 9 o'clock | Breguet spring | Rotor with 18-carat yellow gold medallion | Sapphire glass, convex, antireflective coating on both sides | See-through sapphire-glass back | Water-resistant 3 bar | Case height 14 mm | Diameter 42.3 mm

FOR CONTEMPORARY SEAFARERS AND EXPLORERS

The tradition behind the Portuguese family of watches stretches all the way back to the precision nautical instruments used by seafarers to discover the world. A traditional line like this needs a chronograph with a scale calibrated to an accuracy of a quarter of a second. The elegant design and moderate height of the case have made the Portuguese Chronograph one of the most sought-after Portuguese models of them all. Everything is integrated harmoniously on the clearly organised dial: the recessed totalisers, the embossed Arabic numerals and the perfectly proportioned feuille hands for hours and minutes. This year, two new versions join the chronograph fleet, both in cases with the warm appeal of red gold. The slate-coloured dial with its shimmering sun-pattern finish and jet-black counters is simply superb. In the second new version, the blued hands for times recorded by the stopwatch provide a colourful contrast to the silver-plated dial.

Top: A chronograph is an elegant way of recording periods of time

PORTUGUESE CHRONOGRAPH
REFERENCE 3714

Reference IW371482
in 18-carat red gold with black alligator leather strap

Reference IW371480
in 18-carat red gold with dark brown alligator leather strap

Features
Mechanical chronograph movement | Self-winding | 44-hour power reserve when fully wound | Stopwatch function with minutes and seconds | Small hacking seconds | Sapphire glass, convex, antireflective coating on both sides | Water-resistant 3 bar | Case height 12.3 mm | Diameter 40.9 mm

PORTUGUESE CHRONOGRAPH
REFERENCE 3714

Reference IW371401
in stainless steel with black
alligator leather strap

Reference IW371417
in stainless steel with blue
alligator leather strap

Reference IW371438
in stainless steel with black
alligator leather strap

Features
Mechanical chronograph movement | Self-winding | 44-hour power reserve when fully wound | Stop-watch function with minutes and seconds | Small hacking seconds | Sapphire glass, convex, antireflective coating on both sides | Water-resistant 3 bar | Case height 12.3 mm | Diameter 40.9 mm

CRAFTSMANSHIP FOR CONNOISSEURS

Over 70 years ago, IWC's engineers equipped wristwatches with high-precision pocket watch movements. This marked the birth of the pocket watch-style wristwatches that would later be known as the "Portuguese". Now the Schaffhausen-based company has revived this pivotal event in its history with the new Portuguese Hand-Wound, Reference 5454. Like the watch that founded the family, it is housed in a stainless-steel case and features a pocket watch movement and arched-edge front glass. Another characteristic feature is the simple dial with its railway track-style chapter ring, feuille hands and Arabic numerals. The black dial has a silver-plated seconds circle, while its sister model, with a silver-plated dial, comes with a seconds circle in ruthenium black and rose-gold-plated indices and hands. A distinctive, eye-catching feature in both counters is the signal red "60". The elegance with which this updated model bridges the gap between IWC's past and present is evidenced by a glimpse of the IWC-manufactured 98295 calibre through the transparent sapphire-glass back, revealing the stylish features adopted from the first Jones movements. These include the elongated index and the three-quarter bridge decorated with Geneva stripes. One really could not pay a greater compliment to the original.

Top: The Portuguese Hand-Wound's distinctive features are its simple design and precise pocket watch movement

PORTUGUESE HAND-WOUND
REFERENCE 5454

Reference IW545404
in stainless steel with black alligator leather strap

Reference IW545405
in stainless steel with black alligator leather strap

Features
Mechanical movement | Hand-wound | 46-hour power reserve when fully wound | Glucydur®* beryllium alloy balance with high-precision adjustment cam on balance arms | Breguet spring | Three-quarter bridge | Sapphire glass, arched edge, antireflective coating on both sides | See-through sapphire-glass back | Water-resistant 3 bar | Case height 10 mm | Diameter 44 mm

THE POWER OF SPORT TO CHANGE THE WORLD

Sport is a universal language that unites people and is understood the world over. Sport can be a source of encouragement to socially, physically or economically disadvantaged children and adolescents striving for a better life. The Laureus Sport for Good Foundation, founded by DaimlerChrysler (now Daimler) and Richemont in 1999, uses the power of sport in its efforts to alleviate social problems. The Foundation is represented by its global partners IWC, Mercedes-Benz and Vodafone, all of whom take their corporate social responsibility seriously.

The Laureus Sport for Good Foundation currently supports over 70 projects around the globe. These address some of the greatest social challenges of our time, especially those affecting young people and children, such as poverty, homelessness, war, violence, discrimination, drug addiction, racism and HIV/AIDS. Worldwide, over 1 million children and adolescents benefit annually from these efforts, and that number increases daily. The Foundation is actively supported in its work by the Laureus World Sports Academy, whose members – all sporting legends – come from every corner of the globe and, between them, hold over 100 Olympic medals, 100 world championship titles and 200 world records. Academy members like Edwin Moses, Tanni Grey-Thompson, Robby Naish or Martina Navratilova are personally committed to motivating the children and promoting the power of sport to effect positive social change. National foundations in Argentina, Germany, Italy, France, the Netherlands, Spain, South Africa, Switzerland and the USA provide the projects with on-the-spot support.

The Urban Stars project in Great Britain delivers a multi-sports programme and was set up to tackle crime among young people in several troubled areas of London. It targets adolescents aged 13 to 19, addressing gang membership, crime and antisocial behaviour while opening up ways for them to obtain training or a job. The scheme offers a coaching programme for cricket, football and basketball three times a week, and there are plans to extend it to other cities like Birmingham and Manchester.

Laureus™
SPORT FOR GOOD FOUNDATION

In five regions of the world, the project PeacePlayers International has set itself the goal of using sport to bring together young people in divided areas. In South Africa alone, more than 25,000 children of different colours and ethnic backgrounds from around the city of Durban have taken part in basketball tournaments. 45 basketball courts have been established, and young adults are being trained as coaches and mentors. In Northern Ireland, a basketball project is using sport and dialogue as a means of encouraging reconciliation and religious tolerance between Protestant and Catholic children. Further projects enjoying support from the Laureus Sport for Good Foundation can be found in Israel/the West Bank, Cyprus and New Orleans.

Photo on page 117: Michael Vaughan, Laureus ambassador and English cricketing legend, takes part in an Urban Stars competition in London
Top: Tanni Grey-Thompson, member of the Laureus World Sports Academy, is involved in the PeacePlayers International project

The Laureus Cavallo project in Winterthur, Switzerland, enables children and young people to spend afternoons free of charge at a riding centre. The girls and boys enjoy spending time with the horses and also learn the importance of patience and taking responsibility. Working at the riding centre gives them clear structures and encourages their self-assurance.

In December 2004, an undersea earthquake in the Indian Ocean triggered a gigantic tsunami that ravaged the coastal regions of Southeast Asia and claimed hundreds of thousands of victims. Four months after the catastrophe, representatives of the Laureus Sport for Good Foundation paid a first visit to the devastated southern province of Sri Lanka around Galle. In Seenigama, the most seriously affected of the coastal areas, two-thirds of the inhabitants had lost their lives, leaving hundreds of orphans. The Foundation's team decided to put some hope and joy back into the lives of the traumatised children and adolescents and, through sport, help them come to terms with their horrifying experiences. Together with the local authorities, the charity organisation set up the Seenigama Sports project, which has since established itself as the main provider of leisure time activities for young people in Sri Lanka. The programme provides stability, gives children something to look forward to and helps improve their social skills. Over 1,000 of them participate every month in the various sports on offer, such as cricket, volleyball, badminton, swimming, cross-country running and table tennis.

Top: With the Swiss Laureus Cavallo project, learning to be with horses builds self-confidence in children and adolescents from modest financial backgrounds

BLUE IS THE COLOUR OF HOPE

Once again, with this IWC special edition for the Laureus Sport for Good Foundation, blue represents the colour of hope for disadvantaged children all over the world – this time on the dial of the Portuguese Automatic. Its clear, simple design will ensure that it is a much-coveted timepiece among purists who place exacting demands on mechanical movements. The highly efficient, IWC-manufactured 51011 calibre with Pellaton winding has a 7-day power reserve. In keeping with a revered tradition, and within all the projects supported worldwide by the Laureus Sport for Good Foundation, IWC organises a children's drawing competition. The winning design is engraved on a medallion and set into the back of the case of the special edition. This year, the jury chose the drawing by 12-year-old K. D. Sriyan Chamod Dilshan of Sri Lanka, who illustrated the motto "Team Spirit" with a picture of four young people in a circle, holding hands. The Seenigama Sports project was established with the help of the Foundation in 2005 in the southern province around Galle, the region most badly hit by the tsunami. Sports activities, such as cricket, volleyball and badminton help the children to come to terms with their traumatic experiences. The engraving is a reminder that a portion of the proceeds from sales is destined to help some of the world's problem regions.

Top: Cricket leaves no one cold in Sri Lanka; the Seenigama Sports project has established itself as the most important leisure-time activity for the country's young people

PORTUGUESE AUTOMATIC
EDITION LAUREUS SPORT FOR GOOD FOUNDATION
REFERENCE 5001

Reference IW500112
in stainless steel with blue alligator leather strap

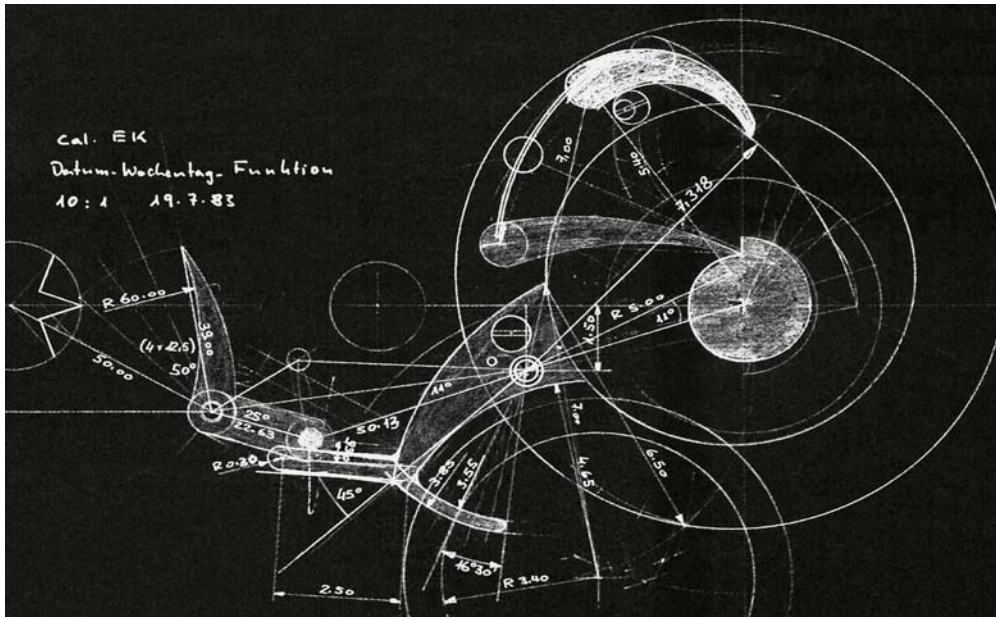
Features
Limited edition of 1,000 watches in stainless steel | Mechanical movement | Pellaton automatic winding | 7-day power reserve when fully wound | Power reserve display | Date display | Small hacking seconds at 9 o'clock | Breguet spring | Rotor with 18-carat yellow gold medallion | Sapphire glass, convex, antireflective coating on both sides | Special back engraving | Water-resistant 3 bar | Case height 14 mm | Diameter 42.3 mm

FROM VINCI TO SCHAFFHAUSEN – A JOURNEY THROUGH TIME

Some 558 years ago, a small village in Tuscany saw the birth of a man without whose genius today's world would be a different place: Leonardo da Vinci. In the 67 years until his death on 2 May 1519, he dreamed up more inventions and machines, and discovered and documented more of the laws of nature than hundreds of his contemporaries and those after them put together.

His lifelong passion was the precise measurement of time. Countless sketches testify to his enthusiasm for the earliest clockworks of the Renaissance. All his groundbreaking inventions, such as gear drives, bevel gears and complicated screw transmission systems, can be found in many machines today, including watches. His work on space-saving spring drives and new escapements, in particular, was pivotal. Posterity is still in awe of the some 6,000 pages of manuscript which he left behind.

Leonardo da Vinci was much celebrated as an artist, scientist and builder of fortifications during his lifetime. But it was only in the 19th century that people slowly began to understand how far ahead of his time he was. For Leonardo da Vinci, the entire known world was a platform for his imagination and love of experimentation. The genius from the tiny village of Vinci invented objects such as the helicopter, the armour-plated vehicle, a three-barrelled cannon, the bicycle, the parachute and even a diving apparatus. None of these items could



be built with the technologies and production methods available back then. In the course of a Da Vinci exhibition initiated by IWC, a mechanism that was assumed to have been a form of propulsion for an aircraft turned out to be a precursor for a watch movement – a discovery that attracted worldwide attention.

In the late 1960s, Leonardo da Vinci's revolutionary way of thinking inspired IWC to introduce a watch named after him. Even that very first Da Vinci model surprised watch lovers with a special quality that has remained typical of the family to this day: that of always being a little ahead of its time. Many trailblazing innovations from IWC have first been developed for use in a Da Vinci, including the revolutionary Beta 21 series quartz movement for wristwatches, unveiled in 1969 as a joint effort by the Swiss watchmaking industry: a quantum leap in the history of precision measurement. However, the massive influx of cheap quartz movements from the Far East, the oil crisis and the collapse in the price of the dollar against the Swiss franc precipitated the greatest crisis ever experienced by the Swiss watchmaking industry. Despite all this, the classical art of mechanical watchmaking, as found in complicated pocket watches, for instance, remained intact at IWC. So it was that, in 1985, IWC presented a masterpiece of Haute Horlogerie: the Da Vinci as a mechanical chronograph with a perpetual calendar and display showing the year in four digits. Never before in a wristwatch had a gear train converted the enormous distance travelled by the escape wheel into a single movement of the century slide. Its intricate mechanism comprises just 83 components and is extremely simple to use: the displays for the date, day, month, year, decade, century, millennium and phase of the moon can all be set synchronously via the crown.

Top: A sketch by Kurt Klaus for the Da Vinci's perpetual calendar mechanism
Left: The Da Vinci Ceramic of 1986 was one of the first watches with a case made of highly scratch-resistant zirconium oxide

Just 1 year later, in 1986, IWC presented a Da Vinci in a high-tech case of coloured ceramic: a world first. To mark the tenth birthday of the automatic Da Vinci Chronograph, the Da Vinci Rattrapante, Reference 3751, appeared in 1995: its split-seconds hand, which was used to record intermediate times, was also the watch's tenth. For the millennium, IWC excelled itself yet again and, with the Da Vinci Tourbillon, Reference 3752, scaled new heights in mechanical timekeeping. In much the same way that Leonardo da Vinci had never ceased striving to make things better, IWC opened a new chapter in the history of the legendary watch family in 2007: after years of research, testing and improvement, all Da Vinci models were housed in a distinctive tonneau-shaped case. The IWC-manufactured 89360 calibre was built for the Da Vinci Chronograph from start to finish in Schaffhausen. For the first time ever at IWC, it integrated the "watch-in-watch" principle: in other words, a chronograph that could be read off directly and whose stopped minutes and hours appeared on a display like that of a normal watch. Other highlights in 2007 were the limited Da Vinci Perpetual Calendar Edition Kurt Klaus – a tribute to the 50th full year of service for IWC by its spiritual father (cf. page 132) – and the Da Vinci Automatic, whose large date display was extremely well received by IWC devotees.

In 2009, the company's engineers added yet another outstanding member to the watch family in the form of the Da Vinci Perpetual Calendar Digital Date-Month: the first flyback chronograph with a perpetual calendar and digital leap year display as well as a digital display for the month and date with large numerals. As you can see in the Technology chapter (cf. page 26), this was a watchmaking tour de force that has been genuinely worth the effort. This year sees the arrival of the new Da Vinci Chronograph Ceramic, with a surprising combination of ultra-hard ceramic and titanium, both polished and satin-finished. Another eye-catching detail is the three-dimensional dial with its floating chapter ring.

Right: The see-through back provides an unimpeded view of the 89360 calibre, which was designed and produced exclusively in Schaffhausen


DA VINCI
IWC
SCHAFFHAUSEN
AUTOMATIC
CHRONOGRAPH

A BIG DATE FOR THE PERPETUAL CALENDAR

In 1884, IWC secured the rights to the Pallweber system, developed by Joseph Pallweber, a Salzburg watchmaker, and started producing the first “digital” watches in IWC’s history. These do not show the time on an analogue display with hands, but with numerals in separate windows. Only the seconds continued to be indicated by a hand. In 2009, 125 years later, IWC presented a new departure in the world of watchmaking: the Da Vinci Perpetual Calendar Digital Date-Month with digital displays for both the date and, for the first time, even the month in large numerals. The power required to switch both month and date discs at the end of the month is accumulated over the course of the entire month in a quick-action switch specially developed for this purpose. At the end of the month, the energy is released and ensures that the displays are advanced, even if the digital leap year also needs to be switched at the same time. The chronograph can run continuously without having any noticeable effect on the watch’s rate and, thanks to the flyback function, can be reset to zero without first having to be stopped. The IWC-manufactured 89800 calibre consists of 474 individual parts and builds up a power reserve of 68 hours. The movement is a miniature powerhouse, in every sense of the term, and a massive watchmaking achievement.

Top: For the first time ever in a watch from IWC, not only the date, but also the month is displayed “digitally” in large numerals

DA VINCI PERPETUAL CALENDAR DIGITAL DATE-MONTH REFERENCE 3761

Reference IW376101
in platinum with black alligator leather strap

Reference IW376102
in 18-carat rose gold with dark brown alligator leather strap

Features
Limited edition of 500 watches in platinum | Mechanical chronograph movement | Self-winding | 68-hour power reserve when fully wound | Perpetual calendar with crown-activated rapid advance | Large double-digit displays for both the date and month | Leap year display | Stopwatch with hours, minutes and seconds | Hour and minute counters combined in a single totaliser at 12 o’clock | Flyback function | Small hacking seconds | Screw-in crown | Sapphire glass, convex, antireflective coating on both sides | See-through sapphire-glass back | Water-resistant 3 bar | Case height 16.3 mm | Case dimensions 44 x 52.8 mm

A TRIBUTE TO AN EXTRAORDINARY DESIGNER

IWC owes a great deal to Kurt Klaus. After all, he spent over 50 years with the company as a highly successful designer and inventor. During this period, his designs included an easy-to-use perpetual calendar that could be set using the crown together with a moon phase display that required no correction buttons. The limited Da Vinci Perpetual Calendar Edition Kurt Klaus pays a fitting tribute to an outstanding watchmaker. In 2009, the stainless-steel model was joined by a version featuring the stimulating colour combination of a black dial with a warm red gold case. If for some reason the watch has not been worn for some time, all the displays – i. e. the date, day, month, four-digit year and perpetual moon phase – can be advanced synchronously, a day at a time, using the crown. The tiny signature can be found, as always, in the bottom right-hand corner of the dial, while the back features an engraved portrait of Kurt Klaus.

Top: The signature of Kurt Klaus, inventor of the perpetual calendar

DA VINCI PERPETUAL CALENDAR EDITION KURT KLAUS REFERENCE 3762

Reference IW376205
in 18-carat red gold with black alligator leather strap

Features
Limited edition of 1,000 watches in 18-carat red gold | Mechanical chronograph movement | Self-winding | 44-hour power reserve when fully wound | Perpetual calendar with crown-activated rapid advance | Four-digit year display | Perpetual moon phase display | Date, day and month displays | Stopwatch function with hours, minutes and seconds | Small hacking seconds | Screw-in crown | Sapphire glass, convex, antireflective coating on both sides | Special back engraving | Water-resistant 3 bar | Case height 15.2 mm | Case dimensions 43.1 x 51 mm

DA VINCI PERPETUAL CALENDAR
EDITION KURT KLAUS
REFERENCE 3762

Reference IW376204
in stainless steel with black
alligator leather strap

Features
Limited edition of 3,000 watches in stainless steel | Mechanical chronograph movement | Self-winding | 44-hour power reserve when fully wound | Perpetual calendar with crown-activated rapid advance | Four-digit year display | Perpetual moon phase display | Date, day and month displays | Stopwatch function with hours, minutes and seconds | Small hacking seconds | Screw-in crown | Sapphire glass, convex, antireflective coating on both sides | Special back engraving | Water-resistant 3 bar | Case height 15.2 mm | Case dimensions 43.1 x 51 mm

HIGH TECHNOLOGY TAKES ON A DEEPER DIMENSION

In 1986, for the first time ever, IWC unveiled a Da Vinci in a ceramic case. The new Da Vinci Chronograph Ceramic combines zirconium oxide, which is extremely scratch-resistant, non-magnetic and acid-proof, with grade 5 titanium, a material that has proven its worth in aircraft manufacture, amongst other things. Apart from the striking bezel, other parts machined from titanium are the case back, the crown and the buttons. For the first time ever, the titanium is satin-finished and polished, giving the watch its luxurious appearance and smooth, silky feel. The inside of the case likewise features various innovations. In another first for IWC, the movement mounting and the seats for the operating parts are machined directly into the ceramic casing ring. The chronograph push-buttons are fitted with newly developed, wear-resistant pushpins, likewise made of ceramic. Also new for IWC is the extravagant design of the dial, which has assumed an attractive, three-dimensional quality. The réhaut volant, a tonneau-shaped minute display, appears to hover above the dial, while the stopwatch hand partially glides below it. This floating chapter ring assumes the same convex shape as the sapphire glass, making the inner surface of the bezel appear flatter. The watch's overall appearance is rounded off by a specially treated calfskin strap whose surface structure is reminiscent of a high-tech fabric. The flyback chronograph combines the hour and minute counters in a single totaliser.

Top: High-tech ceramic and grade 5 titanium for the case and a floating chapter ring for the dial: the new Da Vinci Chronograph Ceramic embodies the art of engineering at its finest

DA VINCI CHRONOGRAPH CERAMIC
REFERENCE 3766

Reference IW376601
in ceramic/titanium with
black calfskin strap

Features
Mechanical chronograph movement | Self-winding | 68-hour power reserve when fully wound | Stopwatch function with hours, minutes and seconds | Hour and minute counters combined in a single totaliser at 12 o'clock | Flyback function | Date display | Small hacking seconds | Screw-in crown | Sapphire glass, convex, antireflective coating on both sides | See-through sapphire-glass back | Water-resistant 3 bar | Case height 15.1 mm | Case dimensions 44 x 52.8 mm

A NEW TAKE ON CALCULATING TIME

In 1985, with its unrivalled Da Vinci calendar/chronograph movement, IWC heralded the arrival of a new age in mechanics. Then, in 2007, the Da Vinci Chronograph featuring the IWC-manufactured 89360 calibre in an innovative tonneau-shaped case with a glass back cover marked the advent of another new and exciting future. As in the past, it records seconds with the large central chronograph hand but displays longer periods of time in easily legible form, with two analogue hands, on a single subdial. Stopped hours and minutes can be read off immediately and unmistakably as if on a second time display. They no longer need to be viewed in separate counters and added together. This innovation, which is based on an extremely sophisticated movement design, has substantially increased the chronograph's practical benefits.

Top: The 89360 calibre allows stopped times of longer than a minute to be read off easily on a subdial

DA VINCI CHRONOGRAPH REFERENCE 3764

Reference IW376409
in platinum with black alligator leather strap

Features
Limited edition of 500 watches in platinum | Mechanical chronograph movement | Self-winding | 68-hour power reserve when fully wound | Stopwatch function with hours, minutes and seconds | Hour and minute counters combined in a single totaliser at 12 o'clock | Flyback function | Date display | Small hacking seconds | Screw-in crown | Sapphire glass, convex, antireflective coating on both sides | See-through sapphire-glass back | Water-resistant 3 bar | Case height 14.4 mm | Case dimensions 43.1 x 51 mm

DA VINCI CHRONOGRAPH
REFERENCE 3764

Reference IW376410
in 18-carat white gold with dark brown alligator leather strap

Reference IW376411
in 18-carat rose gold with dark brown alligator leather strap (also available with 18-carat rose gold bracelet)

Reference IW376413
in stainless steel with black alligator leather strap

Reference IW376414
in stainless steel with stainless-steel bracelet

Features
Mechanical chronograph movement | Self-winding | 68-hour power reserve when fully wound | Stop-watch function with hours, minutes and seconds | Hour and minute counters combined in a single totaliser at 12 o'clock | Flyback function | Date display | Small hacking seconds | Screw-in crown | Sapphire glass, convex, antireflective coating on both sides | See-through sapphire-glass back | Water-resistant 3 bar | Case height 14.4 mm | Case dimensions 43.1 x 51 mm

A GENUINE DA VINCI – JUST A TAD SMALLER

The Da Vinci Automatic is an attractive alternative for watch lovers who would prefer a slightly smaller version of this illustrious watch family. The tonneau-shaped case measures 35.6 x 42.5 millimetres, and the attractive large date display is clearly legible. The silver-plated dial, combined with the 18-carat rose gold case and brown alligator leather strap, is the epitome of elegance. The tobacco-coloured dial, framed by the rose gold or stainless-steel case, is likewise set off to perfection by the dark brown strap. The stainless-steel case with its blue strap and rose-gold-plated hands on the silver-plated dial radiates classical cool. With its 30130-calibre automatic movement, the Da Vinci Automatic is the perfect companion for any occasion.

Top: The design of the hands was inspired by the shape of a classical fountain pen nib

DA VINCI AUTOMATIC
REFERENCE 4523

Reference IW452308
in 18-carat rose gold with dark brown alligator leather strap

Reference IW452311
in 18-carat rose gold with brown alligator leather strap

Features
Mechanical movement | Self-winding | 42-hour power reserve when fully wound | Large date display | Central hacking seconds | Screw-in crown | Sapphire glass, convex, antireflective coating on both sides | Water-resistant 3 bar | Case height 10.9 mm | Case dimensions 35.6 x 42.5 mm

DA VINCI AUTOMATIC
REFERENCE 4523

Reference IW452305
in stainless steel with blue
alligator leather strap

Reference IW452306
in stainless steel with dark brown
alligator leather strap

Features
Mechanical movement | Self-winding | 42-hour power reserve when fully wound | Large date display | Central hacking seconds | Screw-in crown | Sapphire glass, convex, antireflective coating on both sides | Water-resistant 3 bar | Case height 10.9 mm | Case dimensions 35.6 x 42.5 mm


IWC
SCHAFFHAUSEN

PARTNERSHIP FOR AN ENDANGERED PARADISE

Basking in the sunshine on the igneous black rock, the iguanas – both terrestrial and marine varieties – look more like fairytale dragons. The flamingos and turtles enjoy the warmth on land. In the glittering, turquoise-green coves, squadrons of manta rays patrol the shallows while sea lions cavort in the cool waters of the Humboldt Current. Hammerheads circle at lower depths. The Galapagos Islands, 1000 kilometres from the South American mainland, are one of the last natural paradises on earth. Forty percent of the fauna living in the archipelago can only be found here.

The budding British naturalist Charles Darwin visited the Galapagos Islands in September 1835 in the course of an expedition. He found a unique plant and animal ecosystem that differed from one island to the next, and included the finches that now bear his name. The observations he made here formed the essence of his lifework, “The Origin of Species”, which was published in 1859 and has since been the basis of the modern theory of evolution.

Unfortunately, this renowned laboratory of evolution is now under serious threat. The archipelago, declared part of mankind’s world heritage by UNESCO in 1978, was placed on the UN’s Red List in 2007 because it is in grave danger of disappearing forever. Animals imported from outside, such as goats and rats, are jeopardising the indigenous species, with wild goats stripping entire islands of their vegetation. Sharks are hunted down by unscrupulous fishermen, “finned” and thrown back into the sea, where they die a miserable death. On top of this come a growing population and a steady increase in tourism.

The Charles Darwin Foundation (CDF), established in 1959, is conducting a brave campaign to keep the sensitive ecosystem alive. As part of an international network and liaising closely with the Ecuadorian government, the Foundation and its approximately 100 employees are dedicated to scientific research and the protection of the islands’ fauna and flora. However, in order to sustain its work, the CDF is largely dependent on donations. For years now, IWC has been committed to the principle of sustainability. The Schaffhausen-based company donates a considerable sum to help the charitable organisation in its work.

The involvement of IWC Schaffhausen in the exploration and protection of the fragile underwater world has a long tradition: indeed, the company’s connection with scuba diving goes back to the 1960s. It was the sport’s growing popularity that prompted IWC to launch the first Aquatimer in 1967. It was pressure-resistant to 20 bar and equipped with an internal rotating bezel that showed dive time. In 1982 came the first diver’s watch made of titanium: pressure-resistant to 200 bar, with an external rotating bezel, the Ocean 2000 created a furore.

Top: The spotted eagle ray is on the Red List of Threatened Species
Left: The first Aquatimer, 1967

It was in 1997 that IWC unveiled the GST sports watch line, which rapidly became a symbol of ruggedness combined with suitability for everyday wear. The inventive spirit of IWC's engineers then led to the GST Deep One in 1999. This eye-catching diver's watch in its titanium case was the first IWC watch with a mechanical depth gauge. The Aquatimer Deep Two, launched in 2009, is a worthy successor.

In 2009, precision, reliability and sophistication, together with the numerous technical improvements made to the new Aquatimer generation, once again underpinned the Schaffhausen-based company's aspirations to a leading position in the world of mechanical watchmaking. The most striking modification to the diver's watches, which have also become larger overall, was the external rotating bezel with its inset sapphire glass. Its underside is treated with a thick coating of Super-LumiNova®*, which guarantees that the dive time can be read off even in adverse lighting conditions with poor visibility. The chunky external rotating bezel can be turned anticlockwise even with thick gloves and clicks securely into place. Thanks to the quick-change system** (cf. Technical details) the stainless-steel bracelet can now be exchanged in seconds – without the need for any special tools – for a rubber or hook-and-loop strap. The latter allows the watch to be worn over a diving suit (cf. page 39).

Top: The marine iguanas endemic to the Galapagos Islands are threatened by feral domestic animals

With the Aquatimer Chronograph in 18-carat red gold, IWC launched its first diver's watch in a case made of precious metal in 2009. Undoubtedly the most impressive feature on the Aquatimer Deep Two is its precise mechanical depth gauge, which indicates current dive depth as well as the maximum depth attained in the course of a dive down to 50 metres (cf. page 36). The bold colours chosen for the Aquatimer Chronograph are particularly striking, with a coral red or signal yellow arc for the first quarter-hour combined with a deep blue or black dial. The outstanding feature of the Aquatimer Automatic 2000 is its unusually high pressure-resistance of 200 bar. With its high-quality rubber-coated case, the Aquatimer Chronograph Edition Galapagos Islands feels every bit as good as it looks.

Top: Hammerhead sharks have highly receptive sensory organs which they use to locate prey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SWISS MADE

AN ELEGANT WAY TO TAKE THE PLUNGE

With the Aquatimer Chronograph in 18-carat red gold on his wrist, a man can change from a diving suit directly into a dinner jacket. The imposing case with its chunky external rotating bezel is an attention-grabber on land, while the ultra-strong luminescent coating under the sapphire-glass ring guarantees optimum legibility – and admiring glances – under water. The red colour accents underscore the sporty character of a diver's watch tested to pressures of 12 bar. Thanks to the flyback function, the chronograph can be stopped, reset and restarted, all at the touch of a button. Stopped hours and minutes are displayed on a subdial. The exclusive IWC-manufactured 89360-calibre movement, equipped with IWC's efficient double-pawl winding system, has built-in protection against shocks and impacts. Thanks to the bracelet quick-change system** (cf. Technical details), the rubber strap with its tough stainless-steel pin buckle can be exchanged quickly and easily for a hook-and-loop strap without the need for special tools.

Top: Thanks to the flyback function, the chronograph can be stopped, reset and restarted, all at the touch of a button

AQUATIMER CHRONOGRAPH REFERENCE 3769

Reference IW376903
in 18-carat red gold with black rubber strap

Features
Mechanical chronograph movement | Flyback function | Self-winding | 68-hour power reserve when fully wound | Date display | Small hacking seconds | Mechanical external rotating bezel | Luminescent elements on hands, dial and external rotating bezel | Screw-in crown | Sapphire glass, convex, anti-reflective coating on both sides | See-through sapphire-glass back | Water-resistant 12 bar | Bracelet quick-change system** (cf. Technical details) | Case height 15.5 mm | Diameter 44 mm

THE COLOURS OF THE SEA

The external rotating bezel, whose arrowhead index marks the beginning of the dive, likewise gives the Aquatimer Chronograph in stainless steel a striking new face. To ensure that they stand out clearly, the arc for the first quarter-hour of the rotating bezel and the minute hand are finished in luminescent marine colours: coral red combined with a deep blue dial or signal yellow with black. Yellow is only filtered out in very deep water and is thus visible for an unusually long time. The diver's watch, which is water-resistant to 12 bar, has increased slightly in girth and, thanks to the Super-LumiNova®* coating, is considerably more legible. The much lighter subdials for the minute and hour counters also make it easier to read stopped times under water. Both versions are available with a stainless-steel bracelet or a blue or black rubber strap.

Top: The light-coloured subdials make it easier to read stopped times under water

AQUATIMER CHRONOGRAPH
REFERENCE 3767

Reference IW376704
in stainless steel with
blue rubber strap

Reference IW376703
in stainless steel with
stainless-steel bracelet

Features
Mechanical chronograph movement | Self-winding | 44-hour power reserve when fully wound | Date and day display | Small hacking seconds | Mechanical external rotating bezel | Luminescent elements on hands, dial and external rotating bezel | Screw-in crown | Sapphire glass, convex, antireflective coating on both sides | Water-resistant 12 bar | Bracelet quick-change system** (cf. Technical details) | Case height 15 mm | Diameter 44 mm

AQUATIMER CHRONOGRAPH
REFERENCE 3767

Reference IW376702
in stainless steel with
black rubber strap

Reference IW376701
in stainless steel with
stainless-steel bracelet

Features
Mechanical chronograph movement | Self-winding | 44-hour power reserve when fully wound | Date and day display | Small hacking seconds | Mechanical external rotating bezel | Luminescent elements on hands, dial and external rotating bezel | Screw-in crown | Sapphire glass, convex, antireflective coating on both sides | Water-resistant 12 bar | Bracelet quick-change system** (cf. Technical details) | Case height 15 mm | Diameter 44 mm

A DIVER'S WATCH IN THE SERVICE OF EVOLUTION

The Aquatimer Chronograph Edition Galapagos Islands makes a statement about a partnership for the environment which IWC Schaffhausen has entered into with the Galapagos-based Charles Darwin Foundation. For fifty years now, the Foundation has been making visitors aware of the archipelago's uniqueness and providing them with guidelines to ecologically sound behaviour. At the same time, it keeps watch to ensure that the waters are not plundered and that the animals do not fall victim to poachers or predators imported from elsewhere. IWC supports the work of the Foundation with a sizeable contribution generated by proceeds from the sale of the Aquatimer Chronograph Edition Galapagos Islands. This Aquatimer is the result of an evolution in watchmaking technology. The stainless-steel case undergoes a complex vulcanisation process that leaves it with a matte-black rubber coating. This makes the watch, which is pressure-resistant to 12 bar, a joy to see and feel: as black as the lava on the volcanic islands and as white as the mist in which they are often shrouded.

Top: The case of the Aquatimer Chronograph Edition Galapagos Islands has a vulcanised rubber coating

AQUATIMER CHRONOGRAPH EDITION GALAPAGOS ISLANDS REFERENCE 3767

Reference IW376705
in rubber-coated stainless steel
with black rubber strap

Features
Mechanical chronograph movement | Self-winding | 44-hour power reserve when fully wound | Date and day display | Small hacking seconds | Mechanical external rotating bezel | Luminescent elements on hands, dial and external rotating bezel | Screw-in crown | Sapphire glass, convex, antireflective coating on both sides | Water-resistant 12 bar | Bracelet quick-change system** (cf. Technical details) | Case height 15 mm | Diameter 44 mm

PERFECT TIMING FOR DEEP-SEA DIVERS

With its 44-millimetre case and pressure-resistance to 200 bar, the Aquatimer Automatic 2000 is ideally suited for underwater use. The striking external rotating bezel, the hallmark of the current Aquatimer generation, can be turned easily under water, even when wearing gloves. No fewer than six coatings of Super-LumiNova®* are applied to the underside of the sapphire-glass ring. Thanks to this highly effective luminescent material, the elapsed dive time is clearly visible even in poor lighting conditions. The watch is available with a white or black dial, with the minute hand and arc for the first quarter-hour in white or signal yellow. Both models are available with the choice of either a practical, rugged bracelet in stainless steel or a black rubber strap with a pin buckle. Professional divers will also find the extra-long hook-and-loop strap (available as an optional extra) useful when wearing the watch over a diving suit.

Top: With pressure-resistance to 200 bar, the Aquatimer Automatic 2000 meets the exacting demands of the most ambitious diver

AQUATIMER AUTOMATIC 2000
REFERENCE 3568

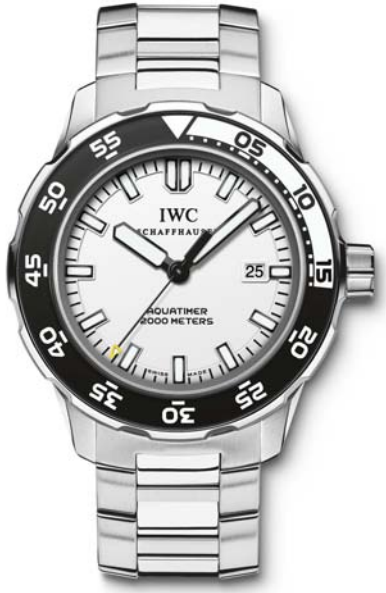
Reference IW356802
in stainless steel with
black rubber strap

Reference IW356801
in stainless steel with
stainless-steel bracelet

Features
Mechanical movement | Self-winding | 42-hour power reserve when fully wound | Date display | Central hacking seconds | Mechanical external rotating bezel | Luminescent elements on hands, dial and external rotating bezel | Screw-in crown | Sapphire glass, convex, antireflective coating on both sides | Water-resistant 200 bar | Bracelet quick-change system** (cf. Technical details) | Case height 14 mm | Diameter 44 mm

AQUATIMER AUTOMATIC 2000
REFERENCE 3568

Reference IW356806
in stainless steel with
black rubber strap



Reference IW356805
in stainless steel with
stainless-steel bracelet

Features
Mechanical movement | Self-winding | 42-hour power reserve when fully wound | Date display | Central hacking seconds | Mechanical external rotating bezel | Luminescent elements on hands, dial and external rotating bezel | Screw-in crown | Sapphire glass, convex, antireflective coating on both sides | Water-resistant 200 bar | Bracelet quick-change system** (cf. Technical details) | Case height 14 mm | Diameter 44 mm

PLAYING IT SAFE DOWN IN THE DEPTHS

With its mechanical depth gauge, the Aquatimer Deep Two offers maximum safety and security. Water-resistant to 12 bar, the watch contains a complete backup system that permits the diver to measure and plan vital parameters such as dive depth and time in the event of a dive computer failure. Two indicators show current depth and the maximum depth reached in the course of the dive (down to 50 metres) on a white scale. The blue indicator moves to show the actual dive depth, while the red one remains static at the maximum depth attained during the dive. The pressure metering system is located on the left-hand side of the case (cf. page 36 to read how it works). The Aquatimer Deep Two has an enormous 46-millimetre stainless-steel case that houses a 30110-calibre automatic movement with central seconds, date display and 42-hour power reserve. The steel back is decorated with an elaborate relief engraving of a diving helmet.

Top: The blue indicator moves to show the current dive depth on the white scale, while the red one remains static at the maximum dive depth (down to 50 metres)

AQUATIMER DEEP TWO
REFERENCE 3547

Reference IW354702
in stainless steel with
black rubber strap

Reference IW354701
in stainless steel with
stainless-steel bracelet

Features
Mechanical movement | Self-winding | 42-hour power reserve when fully wound | Date display | Central hacking seconds | Mechanical external rotating bezel | Mechanical depth gauge with split indicator showing maximum depth to 50 m | Luminescent elements on hands, dial and external rotating bezel | Screw-in crown | Sapphire glass, convex, antireflective coating on both sides | Water-resistant 12 bar | Bracelet quick-change system** (cf. Technical details) | Case height 15.5 mm | Diameter 46 mm

NOW THERE'S A NAME FOR VISIONARY TECHNOLOGY: INGENIEUR

No other watch from IWC has cemented the company's reputation for technical expertise as strongly as the first Ingenieur, launched in 1955 with an IWC automatic movement housed in a soft-iron inner case for protection against magnetic fields. The giant leap from hand-wound to automatic movements had been made four years earlier with the then revolutionary IWC 85 calibre with central seconds, whose origins dated back to the 1940s. However, it was only with the Ingenieur that IWC catapulted itself into the vanguard of Swiss manufacturers competing to create the first bidirectional automatic movement. Its winding system – featuring a rocking bar and rollers in the automatic 85-calibre family – goes all the way back to Technical Director Albert Pellaton and set new standards in watchmaking.

The Yacht Club and the Ingenieur SL in the 1960s and 70s, featuring the further developed 8541 and 854 calibres (with and without date display), were even more robust. The Yacht Club's movement even had a shock-absorption system cushioned on rubber buffers. From 1976, the 8541ES calibre – the distillation of all the company's movement-making expertise – was used in the Ingenieur SL, Reference 1832. This watch is still much sought after by collectors today, and its unusual shape has become one of the hallmark features of all subsequent models in the Ingenieur watch family: the five distinctive bores in the bezel, the "graph paper" design – as it used to be known to collectors – on the dial and the bolt of lightning in the logo. When IWC manufactured its first titanium cases in the early 1980s, the ultra-slim Ingenieur Titanium, Reference 3350, was one of the front runners. In 1989, IWC presented an Ingenieur, Reference 3508, with protection against magnetic fields up to 500,000 amperes per metre that could withstand even an magnetic resonance tomograph.

In 2005, the Ingenieur, one of IWC's best-known timepieces, celebrated a resounding comeback: mechanical engineering at its purest in the shape of a watch. The new generation withstood shocks, impacts and vibrations, and functioned reliably in the presence of the magnetism – now omnipresent – emitted by an increasing number of machines and appliances. With its extra-large 51113 calibre, Pellaton winding and 7-day power reserve, the 45.5-millimetre Big Ingenieur in its stainless-steel case caused a furore when it was launched in 2007. A year later, it was unveiled in platinum and rose gold versions.

Whilst IWC's Pilot's Watches were inspired by the skies, and the Aquatimer family by the oceans, the element that gave rise to the Ingenieur was the earth. So it seems only logical that the "raison d'être" of the Ingenieur Automatic Mission Earth is mentioned in its name. For devotees of mechanical timepieces with a penchant for absolute precision, the Big Ingenieur is also now available as a chronograph with an analogue display for long recorded times and a tachymeter scale.

Top: Ingenieur watches prove their ruggedness in practical use under gruelling conditions like those found in the bleak desert landscapes of the south-western USA
Left: The first time the hallmarks of the watch family's design feature together: the Ingenieur SL, Reference 1832, unveiled in 1976

Perhaps more than any other watch family from IWC, the Ingenieur's name stands for ruggedness even under extreme conditions and a passion for nature paired with a lust for adventure. One man who knows all about this is adventurer and environmentalist David de Rothschild, with whose organisation, Adventure Ecology, IWC has entered into a long-term partnership. Adventure Ecology is an organisation that harnesses the power of dreams, adventures and stories, drawing on them to inspire, educate and engage individuals, institutions and industry to move towards a smarter, more sustainable way of living. In 2009, IWC paid tribute to this commitment with a special edition, the Ingenieur Automatic Mission Earth Edition "Adventure Ecology", a limited model and counterpart to the Ingenieur Automatic Mission Earth. The robust Adventure Ecology timepieces will accompany David de Rothschild and his crew on a demanding three-month voyage under sail across the Pacific Ocean. In the course of its adventurous journey from San Francisco to Sydney, the "Plastiki" – a catamaran constructed almost entirely of reclaimed plastic bottles and recyclable plastic – will explore a number of environmental hotspots such as soon to be flooded island nations, damaged coral reefs and the challenges faced by our acidifying oceans and marine debris, in particular plastic pollution. The "PLASTIKI" expedition will project these problems into the public eye and generate greater awareness of them worldwide.

Top: Ingenieur watches are in their element in the world's most inhospitable regions
Left: Bedding down for the night before taking on the peak: precision timing is crucial


IWC
INGENIEUR

FOR ENGINEERS WITH A PENCHANT FOR PRECISION

Following the successful launch of the Big Ingenieur, it was only a matter of time before this coveted giant of a watch became available with an IWC-manufactured chronograph. For the first time in this watch family, it also came with the analogue display developed by IWC for long recorded times: stopped minutes and hours can be read off just like the time of day and require no addition. Short stop times of under a minute are timed by the central stopwatch hand. Used in combination with the tachymeter scale, this provides the speed at which a reference distance of, say 1,000 metres, has been completed. Thanks to the flyback function, pushing the reset button returns the stopwatch hand to zero and immediately starts a new timing sequence. For anyone who appreciates complex mechanics, the sapphire-glass back provides a view of the 89360 calibre at work. It is powered by IWC's highly efficient double-pawl winding, which builds up a power reserve of 68 hours in no time.

Top: Stopped minutes and hours are shown together in the upper totaliser

BIG INGENIEUR CHRONOGRAPH REFERENCE 3784

Reference IW378402
in 18-carat rose gold with brown alligator leather strap

Reference IW378401
in stainless steel with black alligator leather strap

Features
Mechanical chronograph movement I Self-winding I 68-hour power reserve when fully wound I Stopwatch function with hours, minutes and seconds I Hour and minute counters combined in a single totaliser at 12 o'clock I Flyback function I Date display with crown-activated rapid advance I Small hacking seconds I Screw-in crown I Sapphire glass, flat, antireflective coating on both sides I See-through sapphire-glass back I Water-resistant 12 bar I Case height 14.5 mm I Diameter 45.5 mm

TIME FOR GREAT ENGINEERS

True greatness comes from within, but is often clearly visible from the outside. The Big Ingenieur, for instance, has an impressive 45.5-millimetre case that is necessary because the extra-large 51113 calibre with its Pellaton automatic winding and 7-day power reserve requires more space. Not everyone, of course, works in high-energy environments, surrounded by strong magnetic fields, so the designers did away with the soft-iron inner case in favour of a sapphire-glass back. This modification provides an unimpeded view of the fascinating movement, significantly reduces the height of the case and makes the watch more comfortable to wear. The watch is available in platinum and rose gold with a silver-plated dial or in stainless steel with a dial in black. Another by now unmistakable IWC feature – the last day indicated in red on the power reserve display – adds a striking touch.

Top: Exclusive to this family of watches: a 7-day power reserve with a red indicator for the last day on the display

BIG INGENIEUR
REFERENCE 5005

Reference IW500502
in platinum with black alligator leather strap

Features
Limited edition of 500 watches in platinum I Mechanical movement I Pellaton automatic winding I 7-day power reserve when fully wound I Power reserve display I Date display I Central hacking seconds I Screw-in crown I Sapphire glass, flat, antireflective coating on both sides I See-through sapphire-glass back I Water-resistant 12 bar I Case height 15 mm I Diameter 45.5 mm

BIG INGENIEUR
REFERENCE 5005

Reference IW500503
in 18-carat rose gold with brown
alligator leather strap

Reference IW500501
in stainless steel with black
alligator leather strap

Reference IW500505
in stainless steel with
stainless-steel bracelet

Features
Mechanical movement I Pellaton automatic winding I 7-day power reserve when fully wound I Power reserve display I Date display I Central hacking seconds I Screw-in crown I Sapphire glass, flat, antireflective coating on both sides I See-through sapphire-glass back I Water-resistant 12 bar I Case height 15 mm I Diameter 45.5 mm

BUILT TO TAKE TERRESTRIAL CHALLENGES

Anyone intending to push himself to his limits in the icy wastes of Alaska, the tropical rainforests of Amazonia or the African desert needs a rugged and reliable companion. Someone – or something – he can count on in any situation. The Ingenieur Automatic Mission Earth was designed to master extreme situations of any kind. Its IWC-manufactured movement has an integrated shock absorber. It is water-resistant to 12 bar, and even magnetic fields of up to 80,000 amperes per metre leave it unmoved. The enlarged stainless-steel case, the protective shoulders for the screw-in crown and the newly designed horns for improved comfort send out a clear message: this is a wristwatch you can count on, through thick and thin. Fitted with a stainless-steel bracelet or black rubber strap, the Ingenieur Automatic Mission Earth was designed with sustainability and a long service life in mind. Its name stands for the urgent task facing all humanity: the need to step up protection for an endangered environment.

Top: The Ingenieur Automatic Mission Earth is also a reliable companion for extreme sports of all kinds

INGENIEUR AUTOMATIC MISSION EARTH
REFERENCE 3236

Reference IW323601
in stainless steel with
black rubber strap

Reference IW323604
in stainless steel with
stainless-steel bracelet

Features
Mechanical movement I Pellaton automatic winding I 44-hour power reserve when fully wound I Integrated shock-absorption system I Date display with crown-activated rapid advance I Central hacking seconds I Soft-iron inner case for protection against magnetic fields up to 80,000 A/m I Screw-in crown I Sapphire glass, flat, antireflective coating on both sides I Water-resistant 12 bar I Case height 15 mm I Diameter 46 mm


HB - HOT
Hohengas
Druckminderver.

PILOT'S WATCHES FROM IWC WRITE HISTORY

In the early days of aviation, pilots used to navigate with the help of pocket watches, because wristwatches specially designed for flying did not yet exist. The first "Special Pilot's Watch", built by IWC in 1936, came with a rugged glass, a rotating bezel with an arrowhead index for instantaneous legibility and an antimagnetic escapement, together with high-contrast, luminescent hands and numerals. From 1940, IWC started producing the 52 T.S.C. Big Pilot's Watch in accordance with military specifications. It featured an original pocket watch movement and large seconds hand. With a case diameter of 55 millimetres and weighing 183 grammes, the largest wristwatch ever built by IWC delivered the precision required of a chronometer and satisfied the special requirements that applied to navigation or deck watches.

The demand for Pilot's Watches equally precise as they were robust had rocketed in the 1930s, not least because the legendary – and extremely reliable – Ju 52 aircraft had paved the way for safe air travel. The aircraft owes its excellent reputation to the basic thinking that was also behind all Pilot's Watches from IWC: reduced in size and simplified to make the aircraft even lighter and easier to service and maintain.

The focus on essentials is also reflected in the cockpit instrumentation. Pilots found themselves having to keep track of an increasing number of instruments. For them it was vital to have a well-organised cockpit and maximum legibility even under the most difficult lighting conditions. The Ju 52's instruments were mostly round, featuring brightly coloured hands against a black background. It was this "instrument look" that guided IWC's designers when

they were creating the original Big Pilot's Watch and the Mark 11, which followed in about 1948. It was manufactured until 1984 and is the best-known IWC Pilot's Watch of them all. It was one of the very first watches to meet the demanding criteria required of a professional Pilot's Watch. Its movement was enclosed in an additional soft-iron inner case, which protected the movement against magnetic fields. The first examples of the Mark 11 and the Big Pilot's Watch still run perfectly to this day and are much sought-after, top-quality collectors' items.

In 1988, the Pilot's Watch tradition was sustained by the Pilot's Chronograph. This was followed in 1992 by the Pilot's Watch Double Chronograph with a split-seconds mechanism and automatic winding. In 1994 the Mark XII Pilot's Watch succeeded the Mark 11. As was to be expected, it was a state-of-the-art timepiece featuring an automatic movement and date display. In 1998 the Pilot's Watch UTC, where changes to both the time and date can be made using simply the crown, was IWC's reaction to growing mobility in an increasingly globalised world. A year later, the new Mark XV emerged as clear winner of a stiff airworthiness test against ten of the best Pilot's Watches available. In 2002, IWC revived the Big Pilot's Watch tradition and launched a new version with a 7-day movement and power reserve display.

In 2008, in recognition of perhaps the world's strongest interpersonal bond, IWC unveiled a special edition – Pilot's Watches for Father and Son. This consists of Pilot's Watches in platinum and stainless steel, available either as a duo or as a set of several pieces, in a beautifully finished case.

Top: The Ju 52 still takes tricky routes over the Alps in its stride
Left: The Big Pilot's Watch; here, the original model of 1940

The poet and pilot Antoine de Saint-Exupéry was already a legend in his own lifetime. People tend to be fascinated as much by his books, translated into more than fifty languages and including the world-famous fairy-tale-like story "Le Petit Prince" ("The Little Prince"), as by his adventurous life. A selection of the stepping stones in his career demonstrates just how much Saint-Exupéry's life, after his training as a pilot, was influenced by his passion for flying. In 1926 he was a pilot for Aéropostale, in 1927 a cargo plane pilot on the Toulouse–Casablanca–Dakar run, and in 1929 director of an airline in Buenos Aires. During his attempt to break the long-distance record from Paris to Saigon in 1935, he crash-landed in the Egyptian desert and was saved literally at the last minute from dying of thirst. After the outbreak of the Second World War, Saint-Exupéry was attached to a reconnaissance squadron in Arras. Following the unit's demobilisation after the ceasefire of June 1940, he obtained permission to return to active military service in 1943 and a year later was fighting against the German occupying forces in North Africa. On 31 July 1944, Saint-Ex, as he was fondly referred to by his admirers, climbed into the cockpit of his Lightning P 38 to carry out a reconnaissance mission over occupied France. He never returned. In 2003, wreckage from his Lightning was salvaged from the Mediterranean near Marseilles.

For 5 years now, IWC has been releasing special editions of the Pilot's Watch that commemorate those works of the French author Antoine de Saint-Exupéry that are closely linked with the pioneering days of flying. In 2006, the Pilot's Watch Chronograph paid tribute to his novel "Night Flight". In 2007, the Pilot's Watch Automatic honoured his gripping

Top: Antoine de Saint-Exupéry with a friend

work "Southern Mail" and, in 2008, the Pilot's Watch UTC the poetic novel "Wind, Sand and Stars". Since 2009, the Big Pilot's Watch Edition Antoine de Saint Exupéry honours his outstanding life's work. Each watch will be accompanied by Nathalie Des Vallières' biography "L'archange et l'écrivain", published in a special edition for IWC.

For over 70 years, IWC has been making Pilot's Watches for professional use and knows precisely what these instruments for pilots must withstand – and how they must perform – in extreme situations. In 2007, the Pilot's Watch Double Chronograph Edition TOP GUN catapulted from nowhere to join the other members of the IWC Pilot's Watch squadron. It takes its name from a special training course offered by the United States Navy Fighter Weapons School for "Strike Fighter Tactics Instructor", better known by the legendary accolade Top Gun. Anyone who successfully completes this course is part of a tiny elite comprising the best-trained, fastest-reacting and most courageous pilots in the world. The demands placed on the young pilots are no less exacting than those on the materials that propel them above the clouds at supersonic speeds – materials that cannot afford to show any sign of weakness. The Pilot's Watch Double Chronograph Edition TOP GUN fully satisfies these requirements.

Top: Anyone who successfully completes the special Top Gun course is one of the best military pilots in the world

In 2003, IWC began producing a Pilot's Watch series named after the legendary Spitfire. The outstanding role played by the most successful British fighter and reconnaissance plane of all time in the Battle of Britain secured the aircraft – of which more were built than any other British plane – lasting cult status in its home country. In its day, the Spitfire was a technological and aerodynamic masterpiece. The large wing area enabled it to take extremely tight curves and gave the aircraft its superior manoeuvrability. The aircraft's outstanding dynamics were due not only to the unusual wings. Chief designer Reginald Joseph Mitchell also designed a retractable undercarriage (for which he made room within wings that were unusually slim for the time), and designed an extremely svelte fuselage whose body was entirely smooth.

Another major factor contributing to the Spitfire's fantastic performance was, of course, the 1,000-HP Rolls-Royce engine, which in the Spitfire Version 1 transmitted its thrust through a fixed, twin-blade propeller. Subsequently, there was a switch to three-, four- and eventually five-blade propellers made of steel. No fewer than 20,351 were built of the 24 versions of the Spitfire in its illustrious career – a figure that has remained unequalled in Great Britain to this day. Today, around 21 Spitfires are still flying and, apart from being welcome guests at air shows all over the world, are also expensive collectors' items: a fully restored aircraft in pristine condition costs around 3 million US dollars. If you can find one.

But the Spitfire watch line owes more than its name to this fabulous aircraft. The austere, technical feel of the silver-coloured dial evokes associations with the elegant fuselage of its namesake. In much the same way that the sheet steel was usually secured to the framework with rivets, the numerals and indices of the watches in the Spitfire collection are "riveted" into position. The appliqués are grouped around the centre of the dial, which is elevated, in the truest sense of the word. Its three-dimensional nature is clear if you look at the watch from an oblique angle.

Top: The legendary Spitfire flying in formation


IWC
SCHAFFHAUSEN
DAYS
AUTOMATIC
25

A PILOT'S WATCH OF A VERY SPECIAL CALIBRE

Since 2002, the Big Pilot's Watch has been IWC's flagship. Its IWC-manufactured 51111 calibre – one of the largest automatic movements in the world – contains all the features that have proved their worth in the long history of IWC mechanical watches. Within no time at all, the automatic movement generates a power reserve of 8.5 days, but only runs for 7 days before being mechanically stopped by an ingenious little train in the power reserve. This eliminates the fall-off in torque that occurs as the mainspring winds down, which could lead to loss of amplitude in the balance and unacceptable inaccuracies in the rate.

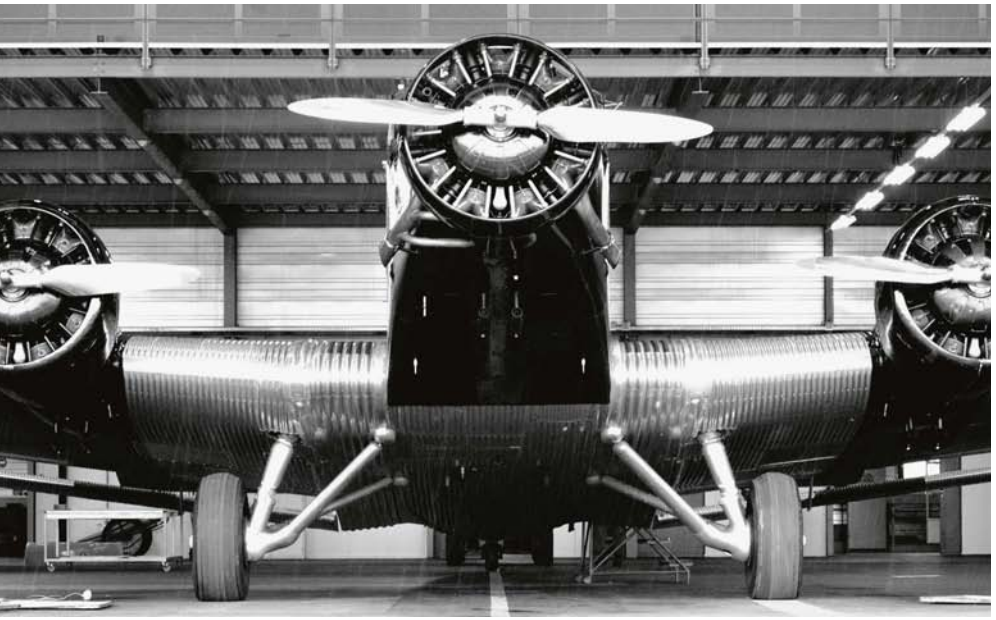
Top: The IWC-manufactured calibre in the Big Pilot's Watch has a 7-day power reserve

BIG PILOT'S WATCH REFERENCE 5004

Reference IW500402
in 18-carat white gold with dark brown alligator leather strap

Reference IW500401
in stainless steel with black alligator leather strap

Features
Mechanical movement | Pellaton automatic winding | 7-day power reserve when fully wound | Power reserve display | Glucydur®* beryllium alloy balance with high-precision adjustment cam on balance arms | Breguet spring | Date display | Central hacking seconds | Soft-iron inner case for protection against magnetic fields | Screw-in crown | Sapphire glass, convex, antireflective coating on both sides and secured against displacement by drop in air pressure | Water-resistant 6 bar | Case height 15.8 mm | Diameter 46.2 mm



AN EVEN GREATER PRESENCE: THE PILOT'S WATCH CHRONOGRAPH

With its case measuring 42 millimetres in diameter, the Pilot's Watch Chronograph is an immediate attention-grabber. The dial leans heavily on the classical design of the Big Pilot's Watch, as can be seen, among other things, from the eye-catching chapter ring and the propeller-like hands. The robust 79320-calibre chronograph movement functions as a stopwatch with aggregate timing up to 12 hours and shows the day and the date. The Chronograph's alligator leather strap comes with a classic pin buckle while the stainless-steel bracelet features a folding clasp.

Top: Reduced to essentials and extremely reliable: these are the characteristics that unite the Ju 52 and the Pilot's Watch Chronograph

PILOT'S WATCH CHRONOGRAPH REFERENCE 3717

Reference IW371713
in 18-carat rose gold with dark brown alligator leather strap

Reference IW371701
in stainless steel with black alligator leather strap (also available with stainless-steel bracelet)

Features
Mechanical chronograph movement | Self-winding | 44-hour power reserve when fully wound | Date and day display | Small hacking seconds | Soft-iron inner case for protection against magnetic fields | Screw-in crown | Sapphire glass, convex, antireflective coating on both sides and secured against displacement by drop in air pressure | Water-resistant 6 bar | Case height 14.7 mm | Diameter 42 mm

A WORTHY SUCCESSOR TO A FLYING LEGEND

The model that originally inspired it, the Mark 11, went on to become one of the most famous Pilot's Watches of all time. Its direct predecessor, the Mark XV, has also established itself as a legend in its own right. But the Mark XVI is in no way overshadowed by its forebears. On the contrary, the 39-millimetre diameter makes the watch's proportions look a touch more balanced. The reduced design of the dial – immediately reminiscent of an aircraft cockpit – underscores the fact that the Mark XVI is a consistent and logical extension to the ongoing Pilot's Watch legend initiated by the Mark 11. The 30110-calibre automatic movement has a 42-hour power reserve and shows the date as well as the time. Protection against magnetic fields and a glass secured against drops in air pressure make the Mark XVI a reliable companion for everyday and extreme situations.

Top: From 1932, the Ju 52 was equipped with three radial engines, each developing 660 HP

PILOT'S WATCH MARK XVI
REFERENCE 3255

Reference IW325501
in stainless steel with black alligator leather strap

Reference IW325504
in stainless steel with stainless-steel bracelet

Features
Mechanical movement | Self-winding | 42-hour power reserve when fully wound | Date display | Central hacking seconds | Soft-iron inner case for protection against magnetic fields | Screw-in crown | Sapphire glass, convex, antireflective coating on both sides and secured against displacement by drop in air pressure | Water-resistant 6 bar | Case height 11.5 mm | Diameter 39 mm

PILOT'S WATCHES STAY IN THE FAMILY

Watches have always been one of the most personal of family gifts. Linked as they often are with a special memory, a joyous occasion or an unforgettable piece of family history, their value goes far beyond that of an everyday object. Now young men no longer need to wait to inherit a much-coveted timepiece because IWC now offers all fathers and sons an exclusive opportunity to demonstrate the good taste they have in common while retaining their distinctive personalities – with the set of Pilot's Watches for Father and Son. The external similarities run in the family: the same pale rhodium-plated dial, the striking screw-in onion-shaped crown and the brown alligator leather strap. Hidden away inside the platinum case of the Pilot's Watch for fathers is the imposing IWC-manufactured 51111 calibre with its 7-day power reserve. In terms of size and technology, the stainless-steel model for the son is identical to the Pilot's Watch Mark XVI. This watch is available with a pin buckle or, by special order and for an extra consideration, with a folding clasp. The inner circle on the back cover is reserved for an engraving of the lucky recipient's name – not only a stylish dedication but also a safeguard against mixups – because this Pilot's Watch set also comes in larger versions for fathers with more than one son.

Top: Pilot and co-pilot at work, assisted by the exclusive Pilot's Watch set

PILOT'S WATCHES FOR FATHER AND SON REFERENCE 5004

Reference IW500413
in platinum with brown alligator leather strap

Features
Mechanical movement | Pellaton automatic winding | 7-day power reserve when fully wound | Power reserve display | Glucydur®* beryllium alloy balance with high-precision adjustment cam on balance arms | Breguet spring | Date display | Central hacking seconds | Screw-in crown | Sapphire glass, convex, antireflective coating on both sides and secured against displacement by drop in air pressure | Water-resistant 6 bar | Case height 15.8 mm | Diameter 46.2 mm

PILOT'S WATCHES FOR FATHER AND SON
REFERENCE 3255

Reference IW325512
in stainless steel with brown
alligator leather strap

Features
Mechanical movement | Self-winding | 42-hour power reserve when fully wound | Date display | Central hacking seconds | Screw-in crown | Sapphire glass, convex, antireflective coating on both sides and secured against displacement by drop in air pressure | Water-resistant 6 bar | Case height 11.5 mm | Diameter 39 mm

A BIG PILOT'S WATCH IN HONOUR OF A GREAT MAN'S WORK

The Big Pilot's Watch Edition Antoine de Saint Exupéry completes the limited Pilot's Watch collection which IWC has dedicated to the man who brought passion to his work both as poet and pilot. The series pays tribute to the author's outstanding literary oeuvre. With its – by now characteristic – tobacco brown dial, initial "A" (for Antoine) at "9 o'clock", and riveted calfskin strap, this immensely popular watch is recognisable at a glance to connoisseurs and collectors as an exclusive "Saint Ex". It is also the largest Pilot's Watch from Schaffhausen and requires a case measuring 46 millimetres in diameter to house the IWC-manufactured 51111 calibre with Pellaton automatic winding and 7-day power reserve. The back of the case is embellished with an engraving depicting Saint-Exupéry as a military pilot. Together, the 1,149 watches in stainless steel, 500 in rose gold, 250 in white gold and a unique piece in platinum, which will be sold to the highest bidder, add up to 1,900, the year of the author's birth. The watch is accompanied by Nathalie Des Vallière's biography of Saint-Exupéry, "L'archange et l'écrivain", produced in a special edition for IWC Schaffhausen.

Top: The original initial "A" at "9 o'clock" alludes to poet and pilot Antoine de Saint-Exupéry

BIG PILOT'S WATCH
EDITION ANTOINE DE SAINT EXUPÉRY
REFERENCE 5004

Reference IW500420
in 18-carat white gold with
brown calfskin strap

Features
Limited edition of 250 watches in 18-carat white gold | Mechanical movement | Pellaton automatic winding | 7-day power reserve when fully wound | Power reserve display | Glucydur®* beryllium alloy balance with high-precision adjustment cam on balance arms | Breguet spring | Date display | Central hacking seconds | Screw-in crown | Sapphire glass, convex, antireflective coating on both sides and secured against displacement by drop in air pressure | Water-resistant 6 bar | Case height 16 mm | Diameter 46 mm

BIG PILOT'S WATCH
EDITION ANTOINE DE SAINT EXUPÉRY
REFERENCE 5004

Reference IW500421
in 18-carat rose gold with
brown calfskin strap

Reference IW500422
in stainless steel with
brown calfskin strap

Features
Limited edition of 500 watches in 18-carat rose gold and 1,149 watches in stainless steel | Mechanical movement | Pellaton automatic winding | 7-day power reserve when fully wound | Power reserve display | Glucydur®* beryllium alloy balance with high-precision adjustment cam on balance arms | Breguet spring | Date display | Central hacking seconds | Screw-in crown | Sapphire glass, convex, antireflective coating on both sides and secured against displacement by drop in air pressure | Water-resistant 6 bar | Case height 16 mm | Diameter 46 mm

CLEARANCE FOR TAKE-OFF

The pilots at the United States Navy Fighter Weapons School are the best in their class. Only they can aspire to the ranking of Top Gun, which also features on the side and back of a watch from IWC: the Pilot's Watch Double Chronograph Edition TOP GUN. The case, with its 46-millimetre diameter, is made of black high-tech ceramic, the crown, push-buttons and back cover of matte grey titanium. Powered by the 79230-calibre chronograph movement, the watch is a distillation of all IWC's expertise in the manufacture of professional Pilot's Watches. This is reflected in the aircraft-inspired design elements, all the way through to the altimeter-like date display. On the dial, the small seconds hand and counterpoises of the two central stopwatch hands, all in bright red, stand out clearly. When at rest, the latter are positioned one on top of the other, providing an indication of the watchmaking speciality represented by the double chronograph with its split-seconds function (rattrapante). This can be used to stop times to an accuracy of fractions of a second or to measure intermediate times within any one-minute period. Needless to say in a Pilot's Watch of this calibre, protection of the movement against magnetism is guaranteed by a soft-iron inner case.

Top: Only the best Navy pilots ever attain Top Gun status. They have to be able to take off and land with their jets on the deck of an aircraft carrier

PILOT'S WATCH DOUBLE CHRONOGRAPH EDITION TOP GUN REFERENCE 3799

Reference IW379901
in ceramic with black soft strap

Features
Mechanical chronograph movement | Self-winding | 44-hour power reserve when fully wound | Date and day display | Small hacking seconds | Split-seconds hand for intermediate timing | Soft-iron inner case for protection against magnetic fields | Screw-in crown | Sapphire glass, convex, antireflective coating on both sides and secured against displacement by drop in air pressure | Water-resistant 6 bar | Back cover with Top Gun logo insignia | Case height 17.8 mm | Diameter 46 mm


IWC
SCHAFFHAUSEN
MON 25

THREE VITAL BUTTONS IN THE COCKPIT

The Spitfire Double Chronograph from IWC saw the addition of a fascinating function to this prestigious watch line: the chronograph split-seconds hand, also known by its French name, rattrapante. This feature can be used to time events or to measure intermediate times within a given minute with down-to-the-second precision. Apart from the additional hand, the feature that sets this watch apart is the third push-button located at the "10 o'clock" position on the case, which is mainly responsible for controlling intermediate times. At 17.1 millimetres, the 44-millimetre stainless-steel case housing the 79230-calibre chronograph movement is slightly slimmer than the Pilot's Watch Double Chronograph Edition TOP GUN, its weighty counterpart made of black high-tech ceramic in the classical Pilot's Watch family.

Top: The shape of the hands in the Spitfire watches is reminiscent of the propeller blades found on the legendary fighter and reconnaissance plane

SPITFIRE DOUBLE CHRONOGRAPH
REFERENCE 3718

Reference IW371806
in stainless steel with
brown calfskin strap

Features
Mechanical chronograph movement | Self-winding | 44-hour power reserve when fully wound | Date and day display | Small hacking seconds | Split-seconds hand for intermediate timing | Screw-in crown | Sapphire glass, convex, antireflective coating on both sides and secured against displacement by drop in air pressure | Water-resistant 6 bar | Case height 17.1 mm | Diameter 44 mm

A THREE-DIMENSIONAL FLYING LEGEND

The eye-catching stainless-steel case of the Spitfire Chronograph with its rugged-looking stainless-steel push-buttons is 42 millimetres in diameter, giving it an unmistakably masculine appeal. The raised numerals and recessed totalisers give the chronograph's silver-plated dial a decidedly three-dimensional feel. The hands, whose shape is reminiscent of propeller blades, are coated with luminescent material from shaft to tip and guarantee outstanding legibility by day or night. The 79320-calibre chronograph movement vouches for the watch's mechanical perfection. It permits the timing of periods – or aggregate periods – of time up to 12 hours and displays the date and day of the week. Functionality, precision and reliability are integral features of a Pilot's Watch designed for ultimate performance.

Top: A compelling combination of solid technology and dynamic elegance, the Spitfire is a never-ending source of fascination

SPITFIRE CHRONOGRAPH
REFERENCE 3717

Reference IW371702
in stainless steel with brown alligator leather strap

Reference IW371705
in stainless steel with stainless-steel bracelet

Features
Mechanical chronograph movement | Self-winding | 44-hour power reserve when fully wound | Date and day display | Small hacking seconds | Soft-iron inner case for protection against magnetic fields | Screw-in crown | Sapphire glass, convex, antireflective coating on both sides and secured against displacement by drop in air pressure | Water-resistant 6 bar | Case height 14.7 mm | Diameter 42 mm

THE PILOT'S WATCH FOR TIME TRAVELLERS

Universal Time Coordinated (UTC) is an international time standard that is identical with Greenwich Mean Time (GMT). In an increasingly globalised world, it provides a time constant. It is immensely important to pilots and travellers who change continents and time zones in rapid succession, or for business people who communicate with associates all over the world. In the late 1990s, especially for them, IWC began making a reliable wristwatch with two time zones: the Pilot's Watch UTC with its 24-hour display. On the Spitfire UTC, local time is shown on the dial. This can be advanced or moved back in 1-hour steps, even beyond the date. Home time is displayed in a 24-hour display window.

Top: Cockpit instruments like those found in the Spitfire were the inspiration for the UTC display

SPITFIRE UTC
REFERENCE 3251

Reference IW325110
in stainless steel with
brown alligator leather strap

Reference IW325112
in stainless steel with
stainless-steel bracelet

Features
Mechanical movement | Self-winding | 42-hour power reserve when fully wound | Hour hand adjustable in 1-hour steps (TZC = Time Zone Corrector) | 24-hour display (UTC = Universal Time Coordinated) | Date display | Central hacking seconds | Soft-iron inner case for protection against magnetic fields | Screw-in crown | Sapphire glass, convex, antireflective coating on both sides and secured against displacement by drop in air pressure | Water-resistant 6 bar | Case height 12.5 mm | Diameter 39 mm

GENERATION CHANGE WITH LASTING VALUES

The Spitfire Mark XVI, successor to the popular Spitfire Mark XV, is a millimetre larger in diameter than its predecessor, giving the proportions of the watch even better balance. The functional design of the dial adopts the IWC Pilot's Watch tradition but takes the basic idea a logical step further: the perfect amalgamation of form and function. It is all driven effortlessly by the 30110-calibre automatic movement, which also advances the date display and has a power reserve of 42 hours.

Top: The Spitfire's powerful engines, which generated up to 1000 HP, helped cement its legendary reputation

SPITFIRE MARK XVI
REFERENCE 3255

Reference IW325502
in stainless steel with
brown alligator leather strap

Reference IW325505
in stainless steel with
stainless-steel bracelet

Features
Mechanical movement | Self-winding | 42-hour power reserve when fully wound | Date display | Central hacking seconds | Soft-iron inner case for protection against magnetic fields | Screw-in crown | Sapphire glass, convex, antireflective coating on both sides and secured against displacement by drop in air pressure | Water-resistant 6 bar | Case height 11.5 mm | Diameter 39 mm

THE SOUL OF DISCRETION

When the first Portofino set out to conquer the world from Schaffhausen in 1984, it was an inspired transition from pocket watch to wristwatch, a compelling combination of discreet good looks with understated elegance. The original Portofino, Reference 5251, with its moon phase display, reliably powered by the slim 9521 pocket watch calibre, marked its presence with a case that was an imposing 46 millimetres in diameter. Despite this, the overall design was simple and restrained. It was soon to be followed by a series of smaller models, which over the years have repeatedly shown that discreetly designed watches in elementary forms, transcending modish fads, will always be popular. The Portofino family of watches has always represented the classical wristwatch, a distillation of all the technical expertise at the fingertips of IWC's engineers.

Take the 630-calibre quartz chronograph movement of the Portofino Reference 3731 in 1988, for instance: a veritable masterpiece consisting of 233 parts, it was still a mere 3.8 millimetres thick. In 1995, the Portofino Hand-Wound Reference 2050 showed that even watchmaking achievements at the highest level could still be extremely slim. Although the height of the complete movement was just 3.15 millimetres, the watch featured a perpetual calendar and moon phase, together with displays for the year, date, day and month.

The latest Portofino collection features a chronograph for recording intermediate and aggregate times as well as the Portofino Automatic, which remains dedicated to the timeless simplicity of the series. With its classical design and modern proportions, it self-assuredly espouses the charm of the understatement. One date, three hands: full stop.

Top: In the 1950s and 60s, the former fishing village of Portofino established itself as a favourite haunt of the rich and famous
Left: The size and classical elegance of the very first Portofino attracted admiring glances


IWC
SCHAFFHAUSEN
25
AUTOMATIC
SWISS MADE

WHEN ELEGANCE HALTS THE MARCH OF TIME

In a family with such a clear commitment to discretion as the Portofino, a chronograph might well be considered out of place. Unless, of course, the additional intermediate and aggregate timing functions made possible by the 79320 calibre are so meticulously and discreetly integrated into the dial as in this model. It was for this reason alone that the case was increased to 41 millimetres, the extra 3 millimetres providing space for a day-of-the-week display as well as the date. All this without detracting in the slightest from the watch's inimitably classical shape and lines.

Top: Thanks to the increased diameter, there was room for a day-of-the-week display alongside the date

PORTOFINO CHRONOGRAPH
REFERENCE 3783

Reference IW378302
in stainless steel with brown alligator leather strap

Reference IW378303
in stainless steel with black alligator leather strap

Features
Mechanical chronograph movement | Self-winding | 44-hour power reserve when fully wound | Day and date display | Small hacking seconds | Sapphire glass, convex, antireflective coating on both sides | Water-resistant 3 bar | Case height 13.5 mm | Diameter 41 mm

GOOD THINGS COME IN THREES

It would be as inappropriate to spend too much time talking about the Portofino Automatic as it would be to equip it with more than three hands: hours, minutes and seconds, rounded off by a discreet date display and powered by the mechanical 30110-calibre automatic movement. No more, no less: a perfect example of understatement from Schaffhausen. Since 2007, the case of this timeless classic has measured 39 millimetres rather than 38. The extra size takes away none of its elegance but does give it a more imposing physical presence. The shape of the Portofino Automatic is still a statement of perfect simplicity, underscored by the all-round balance of its proportions and details.

Top: A silent star – the Portofino is the epitome of understatement

PORTOFINO AUTOMATIC
REFERENCE 3563

Reference IW356302
in 18-carat rose gold with black
alligator leather strap

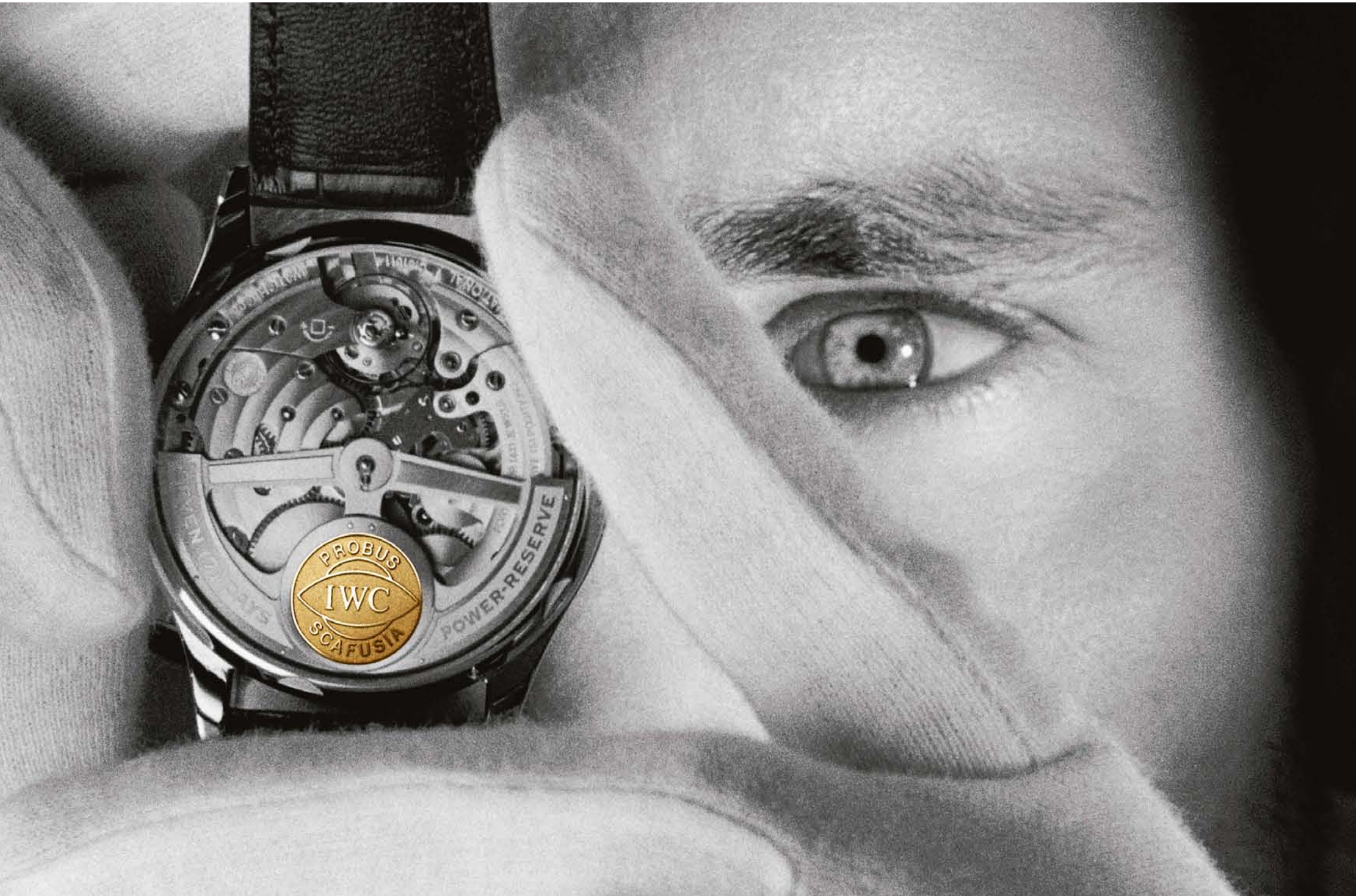
Reference IW356303
in stainless steel with brown
alligator leather strap

Features
Mechanical movement | Self-winding | 42-hour power reserve when fully wound | Date display | Central hacking seconds | Sapphire glass, convex, antireflective coating on both sides | Water-resistant 3 bar | Case height 8.6 mm | Diameter 39 mm

PORTOFINO AUTOMATIC
REFERENCE 3563

Reference IW356305
in stainless steel with black
alligator leather strap

Features
Mechanical movement | Self-winding | 42-hour power reserve when fully wound | Date display | Central hacking seconds | Sapphire glass, convex, antireflective coating on both sides | Water-resistant 3 bar | Case height 8.6 mm | Diameter 39 mm


PROBUS
IWC
SCAFUSIA
POWER-RESERVE

WHY WATCHES FROM SCHAFFHAUSEN ARE SOMETHING SPECIAL

IWC's philosophy
Schaffhausen is an island in Switzerland's watchmaking industry, because the vast majority of the country's manufacturers are based in the French-speaking part of the country. From the very beginning, this unusual geographical location has fostered IWC's philosophy, which is based on a passion for watchmaking, untiring enterprise and perfect craftsmanship. As an international premium brand name, the company has consciously chosen to specialise in innovative mechanical watches. The individual who purchases an IWC watch expects not only precision, functional design and a long service life but also the kind of advanced technical features that only a few watch manufacturers worldwide are able to provide. The reputation of the brand from Schaffhausen is founded not least on the fact that its highly qualified employees master every step of the production processes behind complications like the minute repeater, the power reserve, the tourbillon and the perpetual calendar. Behind the claim to excellence, "Probus Scafusia", which was first formulated in 1903 and stands for good, solid craftsmanship from Schaffhausen, lies the desire to manufacture precision timepieces that will be a joy to use and will retain their value well into the future.

For the designers and construction specialists at IWC, this is not only an enormous challenge but also the force that drives them on to greater things. Every IWC watch is professionally finished by masters of their trade. For they are the individuals whose trained eyes, nimble fingers and precision instruments put together IWC watches from a collection of single parts: each a fascinating example of meticulous workmanship, functionality and design, each an outstanding piece of engineering excellence at its very best.

Right: The tourbillon consists of 81 tiny parts; assembling them calls for the utmost concentration

DEVELOPMENT: BEFORE A WATCH FROM IWC TICKS FOR THE FIRST TIME

Construction and design
Whenever IWC starts developing a new model, one question needs to be asked. What, exactly, do the designers and construction specialists wish to achieve? Should the watch set new standards in complexity? Will its main strength be the power reserve, or perhaps its water-resistance? In an initial step, the first components are "modelled" using computer-aided design. Here, IWC attaches enormous importance to integrating the work of construction and design with modern production technology. Working closely with the construction engineers, the watch designers play a crucial role in determining how best to harmonise form and function. The dial and the strap or bracelet, the positioning of the displays, the choice of materials and colours or the surface finish are always the logical outcome of constructive teamwork. Apart from the technological achievement and an attractive design, other, more emotional, aspects – such as the way the watch actually feels in the hand – also play an important role. Thus, the feel of the edge of the case, the way a push-button is activated or the sound of the crown as it engages are not left to chance. Often, the construction engineers and designers will take their inspiration from old drawings. Ultimately, it is respect for the watchmaking pioneers of the past that guarantees continuity at the Schaffhausen-based company.

Quality assurance
Thanks to a sophisticated development and quality management system backed by an exacting inspection and testing programme, IWC is able to guarantee quality of the highest order. The advanced scientific methods used include three-dimensional computer simulations, X-ray-based materials analyses or tests designed to show how the watches behave under extreme practical, everyday conditions. The use of high-speed cameras and laser measuring instruments make even the tiniest movements visible, and sophisticated computer programs calculate exactly what stresses a part will tolerate.

Details such as seals, push-buttons, wheels, levers, shafts, tooth profiles or the dimensions of springs are examined for possible sources of error from the earliest phases of development. IWC calls this process "error source analysis". At the same time, the developers make the design reliable and service-friendly, while ensuring that an IWC watch will continue to run and can be repaired for many, many years.

TESTS: THE LONG, HARD ROAD FROM PROTOTYPE TO FINISHED PRODUCT

Qualification
This term is used to describe a programme of around thirty gruelling tests lasting several months which are designed for new watches at the prototype phase or later as part of the approval process for the pilot series. These tests simulate in condensed form just about everything that can happen to a watch, under normal and extreme circumstances, during the course of its long life. Only when several prototypes have passed stringent testing and a pilot run has revealed no more problems is the company ready to go into series manufacture, thereby adding another fascinating chapter to the legend that is IWC.

Impact tests
During impact testing, the watch is exposed to various rates of acceleration. Normal acceleration, due to gravity, is 1 g = 9.81 m/s^2. If a force of 100 g is exerted on a watch with a case weighing 100 grammes, the watch's components are subjected for a short time to forces equivalent to 10 kilogrammes. The Pilot's Watches from IWC have even withstood forces of 30 g for periods of several minutes in a centrifugal accelerator. In a pendulum impact tester, the watch is accelerated to 5,000 g in split seconds, which simulates the effect of a free fall onto a hard wooden floor from a height of 1 metre. One of the most demanding tests of them all is the "chapuis extrême": here, the watch is shaken around inside a box for hours on end, subject to knocks and impacts from all sides – 140,000 at a simulated 50 g, 94,000 at 100 g and 30,000 at 500 g.

Tests for wear and tear
For test purposes, some parts are manufactured as early as the design phase in order to check the minimum requirements for those components subjected to unusually high wear and tear. Take the Aquatimer's rotating bezel, for instance, which undergoes a fatigue test equivalent to four dives per day, guaranteeing a minimum service life of 10 years.

Climate tests
In the climate test, the entire spectrum of thermal conditions a watch owner can be exposed to are systematically tested. Geographically speaking, this embraces everything from Alaska to the Sahara and the Brazilian rainforest. Watches are placed in a test chamber where, over a period of days and sometimes weeks, they have to withstand temperature changes from –20 to +70 degrees Celsius and up to 95 percent relative humidity. The next item on the agenda after this ordeal is long-term monitoring of the rate. This test makes use of an automatic multilevel microphone to check the regularity of the beat.

Corrosion and UV tests
A two-week test in a saline bath at 37 degrees Celsius ensures that only materials are selected that will not corrode in daily use or even aggressive salt water. The rotating bezels in IWC diver's watches also have to prove their reliability in dirty water. Glasses and dials are exposed to strong ultraviolet light for days on end and must not show any change of colour.

Practical tests
Test schedules carried out in the laboratory, of course, cannot successfully simulate every situation likely to be encountered in real life. This is the reason why all new models are given to individuals both inside and outside the company who wear them normally under everyday conditions. Effectively, and depending on the model in question, IWC watches are put through their paces when the wearer is chopping wood, diving, playing golf and mountain biking, or climbing at 3,000 metres.

Top: Sophisticated development and quality management have a positive effect on the quality of individual components

ASSEMBLY:
AT IWC, HIGH TECH AND CRAFTSMANSHIP ARE NOT A CONTRADICTION

Production techniques
In the course of components production, the various blanks are machined with the help of CNC milling machines. After surface machining, the acceptable tolerance for components, in general, is just +/– 0.02 millimetres, but in certain cases this may be as low as +/– 0.002 millimetres. After machining, the parts are finished by hand or proceed to an electric discharge machine. CNC wire electric discharge machines are used primarily for parts in the movement. The surface roughness can be controlled to a tolerance of 0.005 millimetres, but for precision EDM work, it is as low as 0.001 millimetres.

Assembling the basic movement
The assembly of a movement can be divided into four distinct stages: the winding mechanism, the going train, the escapement and the actual timing. Depending on the model in question, it will also involve the automatic winding and chronograph mechanisms as well as the calendar and hour counter. The most complex of these jobs is adjusting the escapement and aligning the balance spring so that it runs true and flat: this is a high-precision manual task that no machine could ever carry out to remotely the same high-quality standards. Functions and precision adjustments are checked and corrected continuously at every stage of the assembly process. After this, highly skilled watchmakers in the special features department add on complications such as the perpetual calendar, split-seconds mechanism and tourbillon to the basic movement. Those movements with a minute repeater are assembled here from the bottom up.

Case manufacturing and assembly
In terms of the precision and effort involved, the manufacture of the case is in no way inferior to the other stages in production. For platinum cases, two blanks are cut from a 1-kilogramme block of the metal using an electric wire discharge machine. For watches made of precious metal, the case parts are bought in as cast components or, for stainless-steel and titanium cases, supplied in bar form and then machined on CNC lathes and milling machines. The maximum permissible circularity error of the parts must not exceed 0.03 millimetres. Milling machines are used to cut the lugs for the strap or bracelet and the apertures for the crown and push-buttons into the case middle and to create the complex open surfaces, such as those of the Da Vinci Chronograph. After the function controls, precision craftsmanship brings the surfaces up to IWC standard. The edges are deburred and rounded off,

facets are cut into the necessary areas, all traces of turning, milling and processing are removed, and the surfaces are fine-ground and polished, satin-finished and blasted. Specialists now apply decorative surfaces such as circular graining to the case or components. The case, consisting of up to sixty individual parts, is then assembled. Finally, a series of complex tests such as water-resistance and outward appearance rounds off the case production process.

Dial, hands and casing up
In these departments, all processes are carried out by hand. Depending on the model in question, specialists mount the dials on the fully timed and regulated movement by hand or using special tools. The same applies to the hands, which need to be set at exactly the right height and grip the pivot onto which they are firmly mounted. With chronographs, the zero position of the hands must also be absolutely exact. The movement is secured in position either to a casing ring or directly to the case. If the movement is gripped by a casing ring, the latter is held in position by a wave spring in the case back. The winding stems are individually adjusted. A special adhesive secures crowns that are screwed onto the winding stem.

Top: In the dial, hands and casing up departments, everything is carried out by hand

Final inspection
Over a period of 10 days, the automatic movements in self-winding watches are rotated continuously, while those with manual winding are fully wound every other day. Running-in gives the wheels and pinions a chance to adapt to each other perfectly, while the lubricant penetrates into all the right places.

The quality assurance process is brought to a close with extensive final inspections. A watch's fitness for everyday use is tested one last time by fully winding the movement, measuring its accuracy, checking the functions and appearance, and confirming its resistance to air and water in a series of special tests. The quality of any product that leaves the company on the Rhine is beyond all doubt. This seamless quality assurance process guarantees every future owner of an IWC watch that the company rigorously upholds its legendary quality standards.

Top: The quality assurance process is brought to a close with extensive final inspections

CUSTOMISATION:
ENGRAVING MAKES IWC WATCHES UNIQUE

Every watch from IWC is already a personality with characteristics of its own. Nevertheless, there are still customers who want more, and ask us to give their pocket or wristwatches a touch more individuality. Thanks to modern engraving techniques, the range of options offered by IWC in this area is virtually unlimited. Practically any request for specific changes to personalise a watch can be executed to perfection. “Engraving” comes from the French word “graver” and originally meant “to plough a furrow”. The carving of drawings, patterns, ornamentation or writing on wood, stone, ivory and metal creates attractive light and shade effects and is a means of immortalising very personal ideas. At IWC today, this age-old skill has been preserved in its original form as far as possible. In this way, miniature works of art, such as the engravings on the back cover of the Da Vinci Perpetual Calendar Edition Kurt Klaus or the Grande Complication, are created for posterity. An IWC watch may also be made unique by the addition of engraved initials, a date, a family crest, a company logo or a personal dedication.

Top: An engraving gives the watch a more personal touch

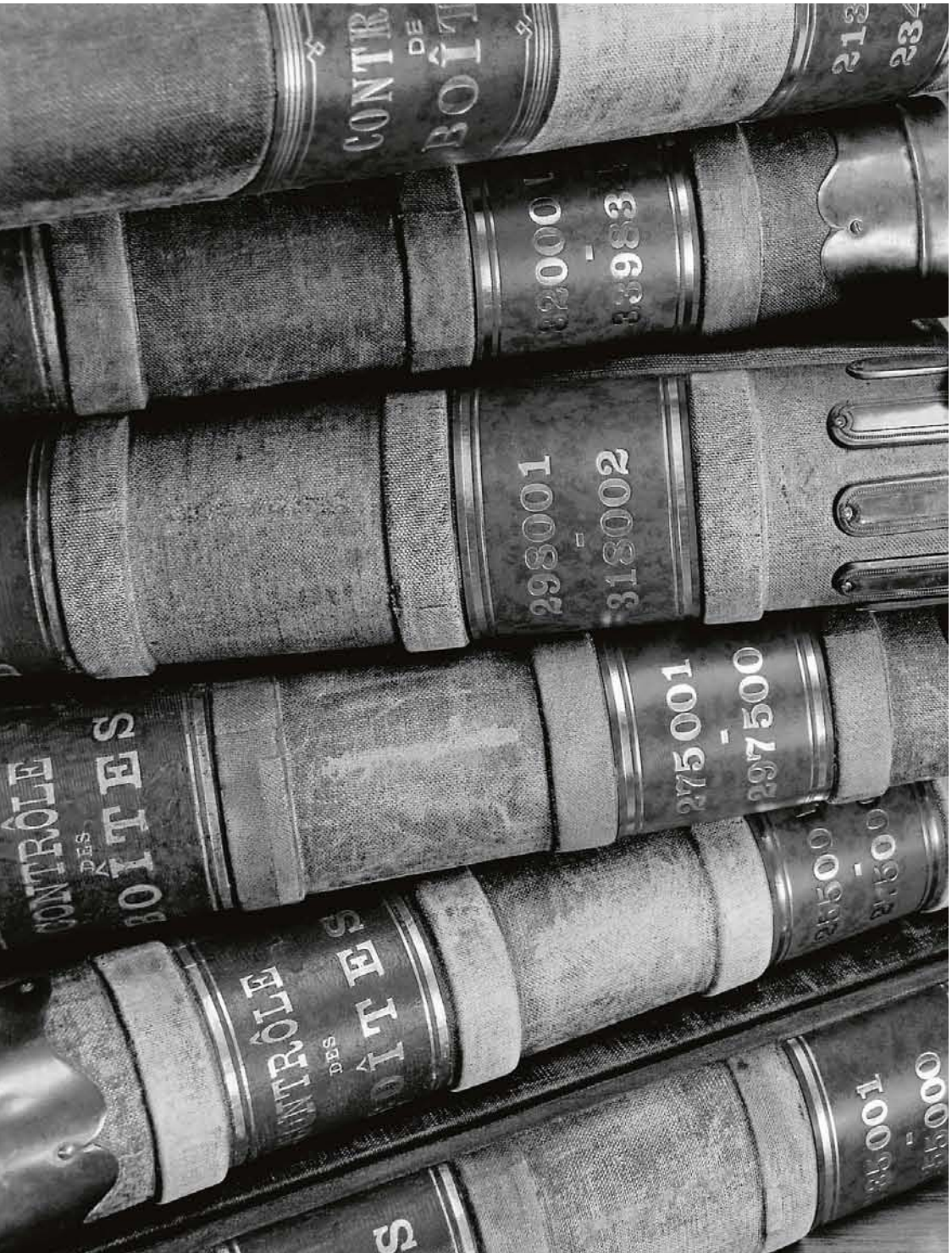
SERVICE:
GENERATIONS TAKE PLEASURE
IN WATCHES FROM IWC

Service and repair
The service department in Schaffhausen employs around fifty people who specialise exclusively in maintaining and repairing watches from all over the world and from every era since IWC’s foundation back in 1868. To ensure that no single detail is lost, IWC has maintained detailed records of every watch that has left the factory since 1885. IWC occasionally receives models going back as far as the first Jones calibre, and even experienced craftsmen are amazed by the achievements of watchmakers of an earlier age. Old pocket watches accurate to less than 3 seconds a day are no rarity.

At the heart of the repair department is the spare parts store. This accommodates millions of meticulously ordered individual components. Needless to say, original replacement parts for all the company’s recent models will also be available for years to come. As a rule of thumb, a quality mechanical watch needs a full service after about 4 to 5 years. The decisive factor is the stresses and strains to which the watch is exposed.

Service
Whenever an IWC watch returns to Schaffhausen, it is treated with the greatest possible care. As part of every service, the watch is demagnetised and the movement completely dismantled. Worn parts, such as wheels, pinions, springs or bearings, are replaced. The movement is then cleaned, reassembled, lubricated and adjusted before being secured firmly in its case. All seals and, if necessary, the crown too are replaced. Finally, the serviced watch is subjected to a series of intensive final checks lasting five days. Only by going to these lengths can IWC guarantee that the watch will run accurately and remain water-resistant for years to come.

By observing a number of simple rules, any owner can help to give his IWC watch a longer effective service life. These include avoiding impacts, not operating any moving parts underwater (with the exception of diver’s watches) and only allowing a specialist to open the case.



IWC's records

The history of every IWC watch begins in the workshops, where dedicated watchmakers spend many hours perfecting every single detail. Sometimes it is difficult for them to part company with the watches they have made. However, to ensure that IWC never completely loses track of its products, the company began keeping detailed records in 1885. Every watch that leaves the IWC factory is registered for posterity. Since 1885, details of the calibre, the materials used and the case have been entered in the records. In the case of later models, these also include the reference number, delivery date and the name of the authorised retailer. This means that, for a small fee, heirs or subsequent buyers can obtain precise information about their watches and the authorised retailer who purchased them.

Today, these records can even be ordered on the Internet at www.iwc.com (in the "Member Area"), although a number of conditions have to be met. The company will only issue details of watches more than 5 years old. In the case of certain models, such as the Special Pilot's Watch, the W.W.W. Watch Wrist Waterproof, or the Mark 11, the early Ingenieur models and the first Portuguese watches, as well as all IWC watches manufactured for military use, certificates can only be issued if the watch itself is sent to Schaffhausen. It is possible to gain an approximate idea of a watch's age by comparing the case number with a listing obtainable at any time on the Internet. It is not possible to provide information about the collector's value of specific models, because this depends on factors such as supply and demand as well as the condition of the movement and case. In the event of a worst-case scenario involving loss or theft, it is advisable to report the incident in writing to the police and IWC. The case number in question is then entered in a special register, which ensures that if the watch does turn up again, it will not go unnoticed. Several instances of loss and theft have been cleared up in this way.

Left: The record books at IWC keep track of every watch made since 1885. Today, the very first record books can be viewed in the museum

IWC TRAINING CENTRE: OUR WATCHMAKERS ARE MASTERS AT MAKING MASTERPIECES

Apprentice training

Ever since its foundation, IWC has been like an island, far removed from the traditional watchmaking centres of western Switzerland. This is one of many reasons why the company has been forced to make its own arrangements to ensure a steady supply of individuals skilled in the manufacture of mechanical watches. It is a commitment the company has embraced with a passion. Since the late 1970s, qualified watchmakers have been much in demand, but IWC started offering its apprentices training to state-recognised "horloger complet" (all-round watchmaker) standard as early as 1950. This resulted in the foundation of its own training workshop with capacity for 26 apprentices and 2 advanced training places in 1968. In 2001, a new set of regulations for trainees and apprentices came into force; these offer budding watchmakers more flexible opportunities.

The apprentice workshops at IWC take an integral approach to training. In Schaffhausen, young people are trained as "horlogers complets", or as they are known in watchmaking circles: all-rounders. Every year, IWC takes on four apprentices, who spend the next 3 or 4 years learning what makes a watch from IWC tick. They spend 80 percent of their time in the training section and the remaining 20 percent on the shop floor.

At IWC, apprentices learn the craft of the watchmaker in its many different forms. The "remonteur" deals with the winding mechanism, the going train and the motion work, the "acheveur" with the parts of the escapement. The "régleur" concentrates exclusively on the balance spring and installing the finished balance in the watch. The "retoucheur" fine-tunes the movement, and the "termineur" inserts it in the case, while the "rhabilleur" specialises in service and repairs. The aim is to give the young trainees as broad as possible an introduction to their profession. Apart from the necessary practical skills, this includes personal factors such as independence, flexibility and creativity as well as other factors such as a willingness to learn or work in a team: for these, too, are essential characteristics for anyone intending to make complex IWC watches. In accordance with the regulations for trainees and apprentices, all watchmaking apprentices will receive the same training for a period of 3 years, after which they receive the title of "practical watchmaker". After this, in their fourth year, they can opt for more specialised training, either in industrial production or in "rhabillage" (repairs). Apart from this, IWC's "réglage" section also offers a training module for trainees who wish to become "réglage" assistants.

Top: Since 1950, IWC has offered its apprentices training to state-recognised "horloger complet" (all-round watchmaker) standard

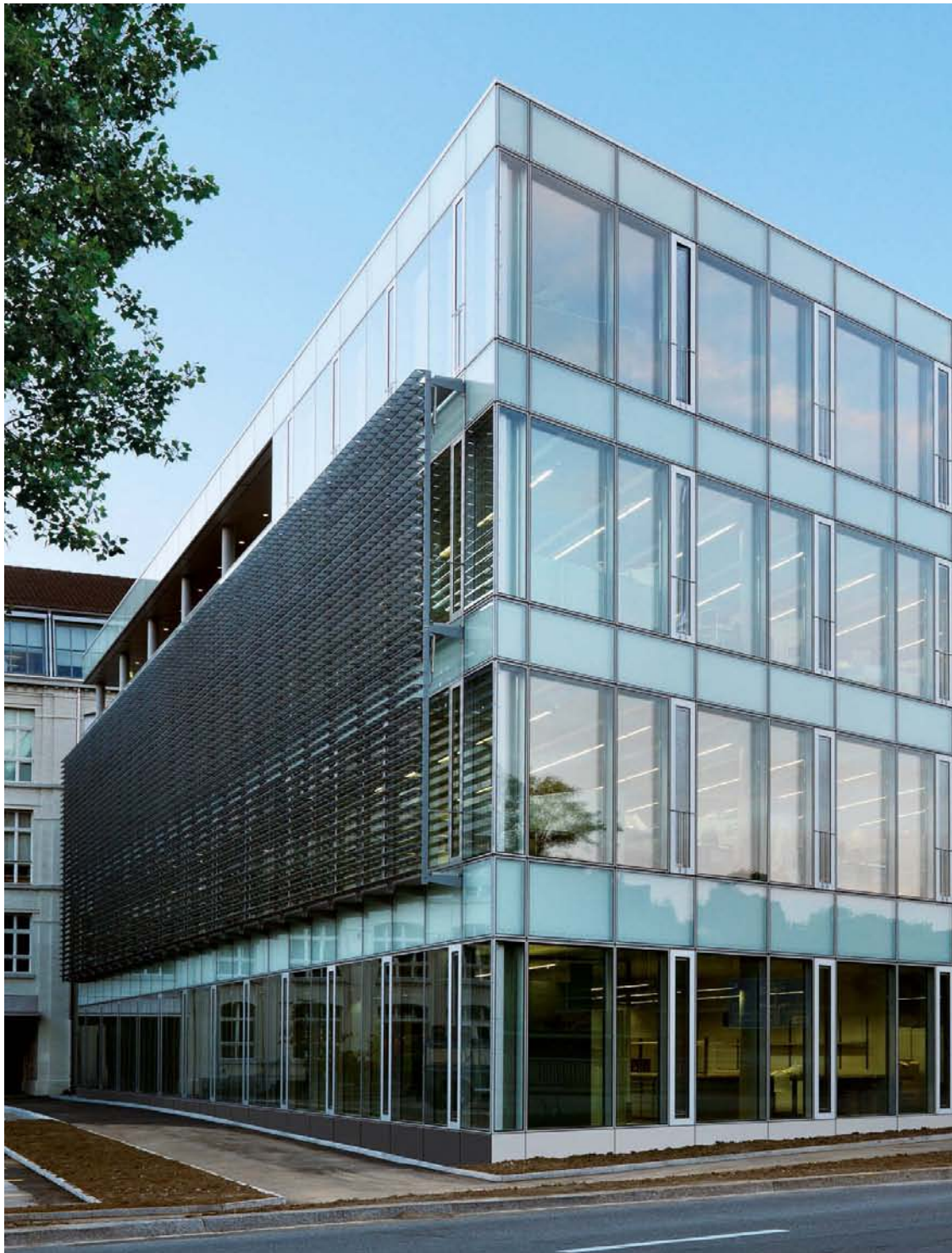
ENVIRONMENTAL PROTECTION: IWC SCHAFFHAUSEN PLAYS A PIONEERING ROLE

Ecological responsibility
Apart from its economic and social obligations, any company has a responsibility towards the environment. At IWC, this is reflected in its premises, which are designed to minimise CO_2 output, and other environmentally friendly measures. Since 2007, for instance, the company has covered its entire electricity needs with “green” hydroelectric power. Thanks to modern, ecologically sound building methods, energy consumption in the past 5 years has remained constant. This is all the more remarkable considering that the total area of the premises increased by 3,000 m^2 following the inauguration of the new East Annexe in 2005 and by a further 5,000 m^2 after the opening of the new West Annexe in 2008, and that production has been stepped up substantially.

As part of its commitment to energy recycling, IWC uses residual heat from the city’s waste water system for the requirements of both the East and West Annexe. The centrepiece of this system is a combined cooling system and heat pump, which is able to generate heat and cold alternately or even simultaneously. The system can be used all year round and reflects the pioneering role played by IWC in Switzerland. Moreover, the East Annexe features two groundwater holders, which can be used to cool the building and machines and, when necessary, supplement the heating system. In addition to this, the company has installed optimally-insulated glass facades, solar collectors for its hot water needs, a rainwater collection system for flushing toilets and a modern ventilation concept to reduce energy consumption.

IWC’s commitment also runs to a highly efficient internal filter plant that reliably isolates the harmful substances contained in waste water from the galvanising, polishing and ultrasound cleaning departments for safe disposal later. IWC has maintained an official environmental balance sheet since 2006 and is now CO_2 neutral.

Right: The triple glazing on the building’s south face guarantees a high level of insulation. The sophisticated slat system prevents heating of the building and saves energy that would otherwise be needed for cooling



MUSEUM:
PLUNGING INTO THE WORLD OF IWC

Watch museum
For watch devotees and IWC fans, a visit to the company's premises in Schaffhausen has long been an unforgettable and defining experience. Since 2007, IWC has presented itself to visitors in a completely newly designed watch museum. The light-flooded areas on the converted ground floor of the main building – formerly the case and parts manufacturing departments – provide a luxurious and, at the same time, functional setting for over 140 years of company history and over 230 carefully selected exhibits.

The tour begins in the West Annexe, where visitors can view original watches from the first 100 years of IWC. The pieces on display include valuable rarities from the history of watchmaking, including one of the very first IWC watches of all, an "American" hunter pocket watch with the 1874-calibre Jones movement, or the first Pallweber pocket watches with a digital display from the mid-1880s. Equally striking are the first Pilot's Watches made in the 1930s and 1940s, especially the Big Pilot's Watch launched in 1940; with a case measuring 55 millimetres in diameter, it is still one of the world's largest wristwatches. Multimedia displays and tableaux provide a detailed and multifaceted introduction to the individual pieces.

Comfortable, lounge-style furniture with audio stations gives interested visitors an opportunity to relax and go with the flow of time as they immerse themselves in an acoustic interpretation of the past and present of luxury mechanical watchmaking. The museum's East Annexe provides a suitable home for the IWC watch families created since 1970. Visitors here can admire milestones in modern watchmaking such as the first Da Vinci wristwatch to feature the first IWC 2001-calibre quartz movement (Beta 21) or the legendary Il Destriero Scafusia. IWC is always pleased to welcome interested visitors to its premises in Schaffhausen, but advance notice is essential for groups or factory visits. IWC is happy to take your reservation at any time on its website at www.iwc.com.

Top: The IWC museum is open from Tuesday to Friday from 3.00 to 5.00 pm and on Saturday from 9.00 am to 3.30 pm
Left: One of the first IWC wristwatches for men, 1899

CHRONOLOGY

1868 Florentine Ariosto Jones (1841-1916), a watchmaker from Boston, Massachusetts, founds the International Watch Company in Schaffhausen. His aim: to produce high-quality pocket watches for the American market.

1875 Construction of new premises and the current headquarters of IWC on the banks of the River Rhine. IWC has 196 employees.

1880 Schaffhausen engine manufacturer Johannes Rauschenbach-Vogel (1815-1881) acquires IWC.

1881 Following the death of his father, Johannes Rauschenbach-Schenk (1856-1905) takes over IWC's helm.

1885 Innovation: the first watches with a digital hours and minutes display (Pallweber system) leave the workshops in Schaffhausen.

1887 Manufacture of the Magique, a pocket watch in a cabriolet case with a 24-hour display that can be used either as a hunter or an open-face pocket watch.

1899 One of the first known wristwatches leaves Schaffhausen destined for the market. The company's small 64-calibre ladies' pocket watch movement is housed in a dainty case fitted with lugs for the wristband. The 63-calibre ladies' pocket watch movement is used for other wristwatches.

1903 Emma Marie Rauschenbach (1882-1955), daughter of Johannes Rauschenbach, marries psychologist and psychiatrist Dr. Carl Gustav (C. G.) Jung (1875-1961). Her younger sister Bertha Margaretha marries Schaffhausen industrialist Ernst Jakob Homberger (1869-1955) the same year.

1905 Following the death of Johannes Rauschenbach, Ernst Jakob Homberger takes over the management of IWC on behalf of Rauschenbach's heirs.

1915 Two newly developed calibres, the 75 (without seconds) and the 76 calibre (with small seconds), are the first movements designed by IWC specifically for wristwatches.

1929 Ernst Jakob Homberger acquires the holding of his brother-in-law C. G. Jung and becomes the sole owner of IWC.

1931 IWC creates elegant, rectangular watches that contain the newly designed tonneau-shaped 87 calibre.

1936 IWC's first "Special Pilot's Watch" is launched. It features a rotating bezel with an arrowhead index that can be used to register take-off times. It is also fitted with an antimagnetic escapement.

1939 The birth of the Portuguese watch: two importers from Portugal order a series of large wristwatches with high-precision pocket watch calibres.

1940 In response to demand, IWC develops the Big Pilot's Watch 52 T. S. C. with a central seconds hand.

1944 The appearance of IWC's first W. W. W.: a new wristwatch for military use by the British Army. The letters W. W. W. engraved on the back of the case stand for "Watch, Wrist, Waterproof", and the royal arrowhead insigna is used as a mark of ownership. Albert Pellaton, born in 1898, takes up his post as Technical Director at IWC.

1946 Pellaton's first design, the 89 calibre movement, has a central seconds hand and is extremely accurate.

1948 Appearance of the Pilot's Watch Mark 11 from IWC with the 89 calibre. Its soft-iron inner case provides unusually high protection against magnetic fields.

1950 The 85 calibre, designed by Albert Pellaton, features IWC's first automatic winding mechanism. The innovative pawl-winding system replaces the traditional reciprocal gearing and, at this time, is a patented proprietary development by IWC.

1955 Hans Ernst Homberger becomes the company's last private owner.
The Ingenieur with automatic winding is launched.

1959 Design of the 44 calibre, the first automatic women's movement from IWC.

1967 With the Aquatimer, IWC marks the beginning of a successful series of diver's watches. Water-resistant to an unprecedented 20 bar, it is the watch of choice for professional use underwater.
The Yacht Club Automatic is unveiled at the Basel Watch Show.

1969 IWC is involved in the development of the Beta 21 quartz movement, a wristwatch calibre with quartz control (frequency 8192 hertz). It marks a watch-making revolution. The Da Vinci is the first IWC wristwatch to feature the Beta 21 quartz movement.

1976 With the new Ingenieur SL, IWC takes the Ingenieur tradition a step further.

1977 The unveiling of the 9721 calibre: the first pocket watch from IWC with a calendar and moon phase display.
IWC embarks on the construction of its complications. These include a series of complicated pocket watches, some of which are also skeletonised.

1978 Co-operation with designer F. A. Porsche results in the first wristwatch with a built-in compass.
The same year, German instrument manufacturer VDO Adolf Schindling AG takes over IWC.

1980 IWC produces the world's first chronograph in a titanium case, designed by F. A. Porsche. IWC procures its expertise in the machining of titanium through an exchange of ideas with Aérospatiale and other leading technology specialists.

1982 IWC launches the ultra-rugged Ocean 2000 diver's watch, made of titanium and pressure-resistant to 200 bar.

1985 The Da Vinci from IWC is the first chronograph to feature a perpetual calendar that is mechanically programmed for the next 500 years and can be set using only the crown. Another exclusive feature is the four-digit year display.

CHRONOLOGY

1986 IWC begins to use zirconium oxide, a scratch-resistant and virtually unbreakable ceramic, as a new case material.

1987 With its Novecento (Italian for “20th century”) the Schaffhausen-based company presents the first rectangular, water-resistant and automatic IWC watch with a perpetual calendar.

1990 A quantum leap in precision watchmaking: the wristwatch-size Grande Complication appears with a wealth of functions: a chronograph with a perpetual calendar, minute repeater and moon phase display. It is a masterpiece that was 7 years in the making.

1993 Watchmaking’s ultimate achievement goes by the name of Il Destriero Scafusia, “The Warhorse of Schaffhausen”. To mark its 125th anniversary, the company produces what was then the world’s most complicated mechanical wristwatch in a one-off limited edition of 125 pieces. The exclusive timepiece features several complications, including a tourbillon, split-seconds, minute repeater and perpetual calendar. Likewise, to celebrate its 125th anniversary, IWC launches a limited series of its Portuguese watch, and in doing so revives the tradition of high-precision, large-calibre wristwatches.

1994 The Pilot’s Watch Mark XII maintains the tradition of the legendary Mark 11.

1995 To commemorate the 10th birthday of the automatic Da Vinci Chronograph, the Da Vinci appears as a split-seconds chronograph with a tenth hand. Another new model is the Portuguese Chrono-Rattrapante, a large-calibre chronograph with split-seconds hand. There is also no mistaking the third new product: the Portuguese Minute Repeater.

1997 The new GST sports watch line makes its debut.

1998 IWC’s designers launch the Pilot’s Watch UTC (Universal Time Coordinated) featuring an hour hand that can be adjusted in one-hour steps and a 24-hour display.

1999 The GST Deep One is a demonstration of IWC’s creativity when it comes to diver’s watches. The GST Deep One is the first IWC watch with a mechanical depth gauge.

2000 With the extra-large 5000 calibre, which runs for 7 days non-stop and features a power reserve display and a Pellaton automatic winding system, IWC’s designers develop the company’s own movement for large wristwatches.
IWC is taken over by Richemont.

2001 Günter Blümlein (1943-2001), amongst other things Chairman of the Board of Directors at IWC, was an outstanding personality who had a decisive influence on the company’s development.

2002 At the Salon International de la Haute Horlogerie (SIHH) in Geneva, IWC presents the Big Pilot’s Watch with its 7-day movement, automatic winding, power reserve display and date display, and revives the company’s tradition of the Big Pilot’s Watch.

2003 The Portuguese Perpetual Calendar with its newly designed perpetual calendar and exclusive hemisphere moon phase display is yet another demonstration of IWC’s innovative tradition. A second highlight is the new Spitfire range of pilot’s watches.

2004 IWC relaunches the Aquatimer family. At the same time, the Portuguese family is extended to include the Portuguese Tourbillon Mystère, the Portuguese Minute Repeater Squelette and the Portuguese Automatic. New models are also added to the Da Vinci and Portofino lines.

2005 Ten IWC premieres in a single year. There are some exquisite new additions to the Portuguese and Da Vinci families and, after 50 years, the Ingenieur makes a spectacular comeback in three versions.
The new East Annexe of the company’s premises in Schaffhausen is inaugurated.

2006 IWC unveils five classic pilot’s watches in a modified design, including the Big Pilot’s Watch and the Pilot’s Watch Chronograph. The watches in the Spitfire collection, such as a larger version of the Spitfire Chronograph, are given a facelift.

2007 IWC presents the tonneau-shaped Da Vinci line. This includes the Da Vinci Chronograph with a completely new IWC-manufactured movement and the Da Vinci Perpetual Calendar Edition Kurt Klaus, named after the man who invented the calendar, commemorating his golden jubilee with IWC. Other new products include the Big Ingenieur and the Spitfire Double Chronograph.
In the summer, the newly designed watch museum opens its doors. A modern, light-flooded space with many attractive exhibits now occupies the area where cases and movement parts were once made, and a multimedia presentation relates the company’s history.

2008 On the 140th anniversary of its foundation, IWC pays homage to the legendary founders of its six watch families in an exclusive IWC Vintage Collection.
The West Annexe, built for the company’s watchmakers in the same style as the East Annexe, is completed.

2009 IWC presents a new generation of technically improved Aquatimer watches together with new models. A much-publicised premiere: the Da Vinci Perpetual Calendar Digital Date-Month arrives on the scene with a big digital display for the date and month in large numerals.

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