

**ΦΣ**

**FILENIOS WATCHES**

**VINTAGE SELECTIONS**



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## GOING VINTAGE

FILENIOS advising service does include vintage models adopting a generic definition for this particular market segment. Old watches are not addressed only to wealthy collectors, but also to those who seek for a daily use watch, as long as they comprehend the particularities and sensitivities of such timepieces. Servicing, improving and maintaining these watches, especially if they demand an extensive overhaul, generates a unique feeling.

This presentation herein refers both to wrist and pocket watches, with the last being not only collectible items, but also a valuable gift for younger people. Pocket watches are among the most remarkable vintage items anybody can find since they come from the distant past, with the potential of being kept functional to the faraway future passing to the next generations.

A relatively new trend in the market is the New Old Projects (NOP) referring to the fitting of old orphaned mechanisms to new cases, thus assembling brand new wristwatches of vintage origin. These old calibers derive both from wrist and pocket watches, and their treatment is usually a demanding and rewarding project for any watch enthusiast.

This E-Guide is materialized primarily thanks to the informative and comprehensive database of [www.ranfitt.de](http://www.ranfitt.de) and the relevant posts in the international watch blogs. The outsourced photos used derive primarily from the best market trading platforms worldwide, with proper reference applicable for all cases. Above all, it is addressed to those who seek for affordable and usable vintage watches including the middle range collectors like myself.





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## Pocket Watch History

They are still in production existing for more than four centuries, and during all this time, their watchmakers have experienced all the progress and evolution of mechanical horology. Almost every application available in contemporary wristwatches had been tested in pocket watches, at least one hundred years before. The summarized history below is based on C.Jeanenne Bell book "Pendant & Pocket Watches 1500-1950".

**16<sup>th</sup> Century:** Germans and French are the pioneers in the transition from table clocks to smaller portable pendant watches, crafted in round, oval, cushion or even octagonal shapes, made from brass, silver, or even rock glass. There is only one hand for the hours, and the mechanisms already use spring barrel with fusee gut cord or stackfreed cam for delivering "constant" force to the primitive forms of balance and verge escapement. In the last quarter, English and Swiss enter in the watchmaking industry.

**17<sup>th</sup> Century:** Jewelers enter in the scenery presenting particular designs (skull watches become fashionable) and applying enamel decoration. In the last quarter, pendant watches get gradually smaller, placed in the newly appearing clothes pockets. The most significant invention is the spiral balance spring from Christian Huygens providing daily accuracy within five minutes by the end of the century, and consequently two hands on the dial. Further developments include the first crystal covers and solid golden cases, plus the use of chain on the fusee.

**18<sup>th</sup> Century:** The most "busy" of all with five major contributions. (1) The first marine watch (H4) from Harrison solves the longitude problem improving navigation and sea transportation. The same is credited with the bimetallic application for temperature compensation on the balance function. (2) Facio introduces the use of stones for reducing wear and tear and improving accuracy. (3) Lepine does away with fusee using a going barrel in direct engagement with the gear train, and re-designs the mechanism plate for smaller watches. (4) Several new horizontal escapement designs appear, with the lever escapement credited to Mudge proven diachronically the most practical solution. (5) The GOAT watchmaker Breguet leaves his mark, primarily with his contribution to shock resistance, perfection of lever escapement and repeater movements, presentation of the rotating tourbillon carriage for neutralizing the gravity effect on the accuracy of pocket mechanisms.

**19<sup>th</sup> Century:** Industrialization drives to the first (more affordable) machine made watches, with the leading American industry setting the standards both in the production process, but also in the chronometry field introducing the railroad grade watches. The Swiss adjust with delay, but eventually they follow, with Roskopf being the first example of accessible, but also qualitative pocket watches of that era. Technically speaking, the watchmakers try to perfect what has already been invented in the previous century, with two major new contributions, the use of crown for both winding and time setting, plus the presentation of the first pocket chronographs from Moinet and Nicole, for facilitating the upcoming sports development.

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### Vintage Pocket Watches

Searching EBAY in 2020, with the entry “pocket watches”, we find more than 100,000 items, available worldwide, with a price fluctuation from less than 50 to more than 100,000 euro. Profoundly there are tens of millions vintage pocket watches in possession and circulation, a considerable asset for preservation, historically covering a period of more than 200 years, at least since the beginning of the 19th century when watchmakers had adopted almost all the contemporary mechanical developments. They are categorized according to their case characteristics, their mechanism escapement type, winding and setting type, their functions, their purpose of use, and finally their industry origin.

#### Open & closed cases

Pocket cases are made from all kind of metals, with silver and gold (9/14/18k) being the most preferable. Open or “Lepine” cases are more practical since the dial and the time is visible, whereas closed ones provide for a front protective cover being more classic. The second are called “Hunter” or “Savonnette”, two names deriving from the English and French tradition respectively.

#### Mechanism escapements

The four most usual escapement types used in vintage pocket watches are the verge-fusee (with chain) combination that appears from the mid-17<sup>th</sup> until the 19<sup>th</sup> century, preferably to English watches, the cylinder escapement used mostly in Swiss (ruby) and French (hardened steel) watches in the 18<sup>th</sup>/19<sup>th</sup> century, the duplex escapement used mostly in English watches (1790-1860) and finally the prevailing lever escapements. The 2<sup>nd</sup> and 3<sup>rd</sup> are combined with fusee or going barrel mainspring.

#### Winding & setting

Stem wind and set is a term referring to the most contemporary pocket watches, with both the winding and the time setting performed using the crown. The first such watches appeared after 1860, one hundred years after the invention of the spring barrel that is wound for providing the necessary energy and power reserve to the watch. Key pocket watches were produced till the end of the 19<sup>th</sup> century, with the key used both for winding and the time setting. They appeal mostly to collectors, and they are not recommended for gift items. Especially for expensive pocket watches from the early 20<sup>th</sup> century, time setting is performed by pushing a pin, usually close to the crown, whereas the American railroad grade watches, are time set by pulling out a small lever. All kinds of buyers should clarify winding and setting details before any potential purchase.

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### **Simple function & complicated mechanisms**

Three hand watches with time and hour central hands, plus small sub second, are the most usual designs. Without ignoring tourbillon carriage, the best perhaps complication on 3 hand designs is the repeater that chimes the time on demand with separate gong sounds for hours, quarters and minutes. One second category includes the chronographs and the stopwatches, with the last counting only elapses periods, not the current time, being a distinguished gift for active people.

### **Marine, railroad, military & art deco**

The first purpose built portable timepieces were the deck chronometer watches from the late 18<sup>th</sup> century, a source of inspiration for all contemporary marine style watches. Railroad grade watches first presented in the late 19<sup>th</sup> century from the American industry, followed by the Swiss immediately after. The most common military timepieces are the “General Service” (GS) WWII watches built for the British forces. All three types, especially the first two, concern high quality mechanisms fitted in watches of historical significance. One last preferable type is the “Art Deco” smaller and more elegant timepieces produced mostly between 1920s and 1950s.

### **American & European industries**

Perhaps the most important selection criteria are related with the country/industry and brand origins, with the American, British, German and Swiss being the most important segmented markets. The first present the best value for money choices, the second and third market require expertise for the acquisition of special and expensive timepieces, like the ones coming from Glashutte. Finally, the Swiss pocket watches are selected on the ground of each brand heritage and significance, without ignoring qualitative offers, related to middle range affordable options.

### **A remarkable gift**

Mechanical pocket watches are produced even today, with interesting models available in tempting prices, like the contemporary skeleton timepieces (based on ETA/Unitas 6497/6498 movements) that exhibit the micro engineering of mechanical calibers, but also more expensive heritage models derived from luxury brands. However, a vintage creation circa one hundred years old, holds historical value that is never lost, this is why it is considered a memorable and sentimental gift for young people, for the next generation that needs to discover the origins of the synchronous world. One fundamental prerequisite is that these watches should be properly serviced and maintained, with documented certificate.

## Filenios International Collection



**Top: Circa 1910 English lever DENT keyless with 15 jewels pin set mechanism**  
**Middle: Circa 1890 Swiss DURSTAIN Union Glocke with 15J pin set mechanism**  
**Bottom: Circa 1900 Swiss anonymous quarter repeater with 15J brevet mechanism**

## Filenios International Collection



**Top: 1919 American WALTHAM railway with Vanguard grade 23J mechanism**  
**Middle: WWII Swiss LODHI PRIMA military with LEONIDAS 15 jewels mechanism**  
**Bottom: 1949 American HAMILTON Art Deco with 917 grade 17 jewels mechanism**



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**MINERVA Valjoux split second chronograph 1950s**



photos sourced from [www.chrono24.com](http://www.chrono24.com)

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HEUER Micrograph 1/100 stop watch 1940s



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French quarter repeater with duplex escapement 1830s



Photos sourced from [www.ebay.co.uk](http://www.ebay.co.uk)

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**3<sup>rd</sup> BREGUET Tourbillon 1809**



Photos sourced from [www.monochrome-watches.com](http://www.monochrome-watches.com)

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**19<sup>th</sup> Century Key Wind & Set Pocket Watches**

The 19<sup>th</sup> century is essentially the post Breguet era when all the inventions of the previous century would be applied to the first machine-made watches, subjected to improvements and new patents. Focusing on simple function 2/3-hand timepieces, these are normally the oldest available with “horizontal” escapement, addressed primarily to collectors. Among them and above all, the single hand Breguet Souscription, his only series produced timepiece, crafted from 1798 to 1805 in a limited volume of around 700pcs, equipped with a central going barrel and ruby cylinder escapement, is perhaps the most representative watch of that period.



Photos sourced from [www.thenakedwatchmaker.com](http://www.thenakedwatchmaker.com)

**English** watches are the most traditional, equipped in a large scale with verge-fusee mechanisms although the majority of top watchmakers use full plate calibers with duplex or English lever escapement, plus  $\frac{3}{4}$  plate mechanisms with mainspring barrel and lever escapement providing for the best quality available.

**French** watches (mostly anonymous) initially maintained the combination of verge-fusee mechanisms, but later on the standard pattern included going barrel with cylinder or duplex escapement avoiding the expensive solution of lever escapement.

**Swiss** watches (signed or not) were equipped with going barrel and cylinder, duplex, lever, or even pivoted detent escapement (GP) depending on the grade of the movement. The quality provided is not standard, reflected on today's market prices.

**German** and **American** watchmakers established their industries in the middle of the century focusing on high grade watches equipped exclusively with going barrel and lever escapement. For the first, the few key pocket watches coming from Eppner and Glashutte watchmakers, are among the most rare and expensive. For the second, most of their watches are equipped with full plate mechanisms, preferably with 11 or 15 jewels, with Waltham and Elgin being the most available ones in the market.

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19<sup>th</sup> Century Key Wind & Set Pocket Watches



Indicative photos sourced from [www.atlam-watches.co.uk](http://www.atlam-watches.co.uk)

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### Marine Chronometers - Pocket Chronometers - Deck Watches

The presentation of the “sea watch” H4 Chronometer by John Harrison in 1761 is the starting point for the marine timepieces that changed the course of navigation and sea transportation facilitating the exact calculation of longitude. **Marine or even better ship chronometers were set at the exact Greenwich Mean Time or the time of the departure port**, and the ship captain was calculating the longitude degrees according to the difference between his local time and the time indicated on the ship chronometer. The more accurate was the chronometer timing, the more precise was the geographic coordinate. In their final form, before the end of the 18<sup>th</sup> century, marine chronometer mechanisms were usually equipped with fusee supplying constant force on a detent escapement that had proven the most credible application for accurate timing. The disadvantage was its susceptibility to shocks, so marine chronometers were mounted on gimbals inside wooden cases.

**Marine chronometers were set once** and they were constantly wound during the trip, with no further adjustment. For verifying the precision of the ship “master” mounted chronometer, the captain had to use an auxiliary or “comparing” oversized pocket watch (not mounted) that was usually equipped with a different kind of movement featuring an ongoing barrel, with a duplex or lever escapement, placed inside a padded wooden box. **The same houses that were building the ship chronometers, were also manufacturing the smaller pocket chronometers or better called (later on) deck watches**, often used as substitutes of the first being more affordable. Since 1820, all kinds of marine timepieces could be tested in the British Royal Observatory of Greenwich, and since the 1850s the certification of chronometers had become a standard, thanks to the operation of several observatories in London (Kew), Besancon, Hamburg, Glashutte, Geneva, Neuchatel.

The few **legendary watchmakers that made marine timepieces**, for more than two hundred years, were the ones who contributed to their evolution and production rationalization (around 100,000 pcs), but even more to the chronometry improvement overall. After J.Harrison and his trainee L.Kendall, those that excelled were T.Earnshaw, J.Arnold, W.M.Bond, Kelvin & White, Dent, V.Kullberg, A.Johannsen, A.Walsh, C.Frodsham and finally T.Mercer among the British. P.LeRoy (detent escapement), Ferdinand & Louis Berthoud, A.L.Breguet, J.T.Winnerl, H.Motel worked for the French navy. Next to Urban Jurgensen, the Swiss pioneers were C.A.Paillard, P.Ditisheim and Ulysse Nardin (copied by Seikosha and the Soviets), followed by Longines, Omega, Zenith, among others. In Germany, A.Lange & Sohne along with Hamburg watchmakers and later on GUB committed their own timepieces, copied by the Soviets (58,000 MX6 pcs till the 1990s). Finally, Hamilton (based on UN) produced more than 10,000 marine timepieces for WWI/II, followed by Waltham and Elgin.

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## Marine Chronometers - Pocket Chronometers - Deck Watches



Indicative photos sourced from [www.worthpoint.com](http://www.worthpoint.com)  
[www.monochrome-watches.com](http://www.monochrome-watches.com) & [www.etsy.com](http://www.etsy.com)



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### Pocket Chronographs & Stopwatches

The term chronograph refers to any timepiece that display elapsed time periods. On the course of history, there has been a separation between stopwatches or timers that count only elapsed time periods on demand, and chronographs that measure both the current time and elapsed time periods, usually featuring an independent central sweep second hand, activated with a dedicated push button, plus a minute or even hour register, with the last being extremely rare for pocket watches.

**The first stopwatch “Compteur de Tierces”** was created by the genius French watchmaker and astronomer Louis Moinet in 1816 featuring 60-second/minute subdials, a third 24-hour subdial, plus a central hand counting “thirds” (1/60) of a second. Today, thanks to J.M.Schaller, it is preserved fully restored and functional, owned by the homonymous resurrected brand, and It is perhaps the most advanced mechanical timepiece of all times, for two reasons. First, it was far ahead of its time operating at a frequency of 30Hz (216,000 VPH), a record performance that was broken 100 years later with the introduction of Heuer Micrograph operating at 50hz. Second, its inventor had even projected for a second back to zero reset pusher, an application patented 28 years later by the English watchmaker Adolphe Nicole.

Further on, in 1831, the Austrian watchmaker Joseph Thaddaus Winnerl (settled in Paris) developed the first pocket watch with an independent central second hand, and 7 years later, he introduced the first double chronograph function with two superimposed second hands. In 1876, the Swiss watchmaker Henry Alfred Lugin (settled in New York) designed and patented **the first mass production chronograph module** (central second hand) that was integrated in the pocket watches of at least three brands, Waltham, Timing & Repeating, Longines, with the last being the timekeeper and sponsor of the first modern Olympic Games in 1896. Longines was also the brand that patented the flyback function in 1936, though it was first presented by Breitling in 1923, and was first utilized by Hanhart in the 1930s.

Apart from the names already mentioned, in addition to the renowned traditional brands like Audemars Piguet, Jaeger Lecoultre, Omega, Patek Philippe, Ulysse Nardin, Vacheron Constantin, Zenith that developed their own chronograph calibers, there had been lesser known brands specialized in the production of pocket chronographs and stopwatches like, Excelsior Park, Gallet, Le Phare, Minerva, Universal. Above all, **Lemania (1884) and Valjoux (1901) are the two most important companies specialized in the production of chronograph calibers**, supplying their movements to many Swiss watchmakers. Finally, some of the most historically significant (WWII) mechanical chronographs and stopwatches had been produced in large numbers by Hamilton (Mod.23), Elgin and Junghans till the 1970s.

Pocket Chronographs & Stopwatches



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### Repeater Pocket Watches

Striking or chiming the hours and minutes on demand, in all possible alternative frequencies (quarter, semi-quarter, decimal, five-minute, minute) is the most demanding and complicated function in watchmaking. The first hour/quarter repeaters from Edward Barlow and Daniel Quare in the late 17<sup>th</sup> century, were succeeded by the first minute repeaters credited to Thomas Mudge and John Ellicott in the mid 18<sup>th</sup> century (all four English watchmakers), just before the invention of the gong-spring mechanism from A.L.Breguet in 1783 introducing the current form of repeater calibers. During the 19<sup>th</sup> century, apart from Breguet, the first active and worth mentioning watchmakers had been Louis Berthoud and Vacheron crafting its very first repeater in 1806, followed by Patek-Czapek and Patek Philippe in 1839/1845. All the rest significant watchmakers like A.Lange, A.LeCoultre, A.Potter, Audemars Piguet, Girard Perregaux, J.Jurgensen, Longines, Omega, Ulysse Nardin, Zenith, manufactured such watches from 1870 to the 1920s indicatively.

#### **Anonymous & Affordable**

French and Swiss watchmakers had created a great number of anonymous quarter and minute repeaters, at least from the early 19<sup>th</sup> century to the late 1930s, with the primary examples being the ones produced by the Swiss watchmaker Charles Barbezat-Baillot being active since 1873. He delivered both branded (Le Phare) and sterile repeating watches of very good quality at rather competitive prices, compared to the established luxury brands. Today, anonymous quarter repeaters are sold in bargain, and no matter their condition, provide for challenging restoration projects, for any capable technician.

#### **Grande Complications**

The minute repeater mechanism along with a perpetual calendar module, form the basis for the so called grande complication watches (11 functions at least) with the first example in history being the legendary “Marie Antoinette” timepiece, finished by Breguet artisans in 1827 and re-produced in 2008. Around the turn of the 19<sup>th</sup> century, brands like ALS, AP, LeCoultre, Leroy, PP, Vacheron, in addition to the English Dent, Frodsham, Player, Smith, had delivered very few usually oversized “piece unique” pocket watches (often with undisclosed prices) to some renowned collectors. Leaving aside contemporary excessive creations like PP-Cal.89 & Cal.2000 plus VC-Ref.57260, one of the most significant grande complication timepieces ever presented is Patek Philippe Ref.881, made in the mid quartz crisis period (1980) for a limited series of 5 pcs, successive to Ref.699 (6 pcs) from the 1940s and the very first PP grande complication watches, introduced 100 years before around 1880.

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Repeater Pocket Watches



Indicative photos sourced from [www.macautimemuseum.com](http://www.macautimemuseum.com)  
[www.antiquesbutique.com](http://www.antiquesbutique.com) & [www.chrono24.com](http://www.chrono24.com)



## **Tourbillon Pocket Watches**

Invented in 1795 and patented in 1801 by A.L.Breguet, the tourbillon carriage that facilitates the rotation of the balance and the escapement, for reducing the effect of gravity on the regulator and consequently the accuracy of timing, is the most impressive invention in the history of watchmaking. Applied in a pocket watch that usually stands in two positions is meaningful, but this is not the case for wristwatches. Especially today, building a functional tourbillon is relatively easy, but building a chronometric tourbillon is very difficult demanding extreme calculations and countless hours for adjustment and regulation. This is why the majority of tourbillon wristwatches are not certified being simply decorative!

### **19<sup>th</sup> Century**

A.L.Breguet and his workshop technicians crafted around 35 pocket tourbillons from 1796 till the late 1820s. The application was so difficult to be implemented that the next tourbillon watches came up in the 1860s, primarily from the Swiss watchmakers Ernest Guinand and Auguste Grether who delivered their mechanisms to Patek Philippe and Girard Perregaux, among others. The first manufactured around 100 observatory watches from 1864 till the 1950s, auctioned today for prices above one million euro. The second manufactured around 25 watches since 1867, with the very characteristic three parallel bridges being one of the most beautiful tourbillon calibers of all times, re-produced several times till today. Further worth mentioning watches were presented by the American watchmaker Albert Potter in Geneva since 1875, plus few London houses like Dent and Frodsham, in addition to the Dane Bahne Bonniksen working in Coventry and introducing the Carrusel type of regulator.

### **20<sup>th</sup> Century and beyond**

Courvoisier Freres presented in 1905 the first inverted tourbillon mechanism (visible from the front) under the name "Mobilis", thanks to the work of the watchmaker Paul Loichot. Among the established brands, since 1946 Jaeger LeCoultre had manufactured 26 observatory watches equipped with Cal.170, one of the best tourbillon movements of all times winning several chronometry contests, and further used by Vacheron Constantin (active from the beginning of the century) for a small lot of watches in the 1990s. Moreover, there are several independent watchmakers that have delivered some marvelous one-piece watches like George Daniels, Thomas Engel, kari Voutilainen (his very first watch), Wilhelm Rieber (the last one), in addition to Derek Pratt who created few tourbillons for Urban Jurgensen & Sonner in the 1980/1990s. Overall till today, it is roughly estimated that less than 1000 pocket tourbillon watches have been crafted, in all this period of 225 years.

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Tourbillon Pocket Watches



Photos sourced from [www.gpchronicles.com](http://www.gpchronicles.com) & [www.watchesbysjx.com](http://www.watchesbysjx.com)

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### American Pocket Watches

This industry was active for almost 120 years, from the early 1850s to late 1960s, with more than 50 brands trying to establish their market position. Some of them were in-house manufactures, some of them assemblers of imported (Swiss) parts, some of them, like BALL, restrained to commercial activity assigning the production to others. All of them contributed to a pioneering industry that not only put the watch in the industrialized era of mass production and affordability, but also proved a catalyst for the transformation of the Swiss industry, and its dominant expansion in the 20<sup>th</sup> century (please check the relevant part of the Swiss history in my website).

#### Railroad grade watches

They are considered the “best value for money” pocket watches across the board, definitely the most significant products of the American watchmaking. Emerged in 1867 by Waltham, long before the application of obligatory timekeeping standards in 1893 (after the fatal Ohio collision in 1891), they contributed to the vast expansion of the local railroad companies. It is worth mentioning the 14 standards that determine the quality of these timepieces: (1) Open face, (2) Wind stem at 12.00, (3) size 16-18 (approx.43-45mm), (4) Minimum 17 jewels, (5) adjusted at least to 5 positions + isochronism, (6) adjusted to temperature variation, (7) double roller with lever escapement, (8) steel escapement wheel, (9) lever set, (10) micrometric regulator and overcoil hairspring, (11) white dial with big bold black Arabic numbers, (12) bold black hands + second hand, (13) Accuracy limit within 30 seconds per week, (14) dust tight case. They were produced from all the brands listed below.

#### Serial and production numbers

The available serial number tables for most brands, allow for the retrieval of the production year in most cases. Based on 80/20 pareto principle, it is estimated that the total production volume of the American watch making industry till 1969, for both types of watches (but primarily pocket) is 140,000,000 pcs.

WALTHAM	1852 - 1957	35,000,000
E.HOWARD-KEYSTONE	1857 - 1930	2,600,000
ELGIN	1864 - 1964	55,000,000
ILLINOIS-HAMILTON	1869 - 1948	5,700,000
ROCKFORD	1874 - 1901	900,000
HAMPDEN	1876 - 1930	4,600,000
COLUMBUS	1883 - 1903	500,000
HAMILTON	1892 - 1969	5,200,000
BALL	1898 - 1942	5,500,000

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American Pocket Watches



Indicative photos sourced from [www.etsy.com](http://www.etsy.com)





### English Pocket Watches

Their dominance in the 18<sup>th</sup> century was succeeded by their gradual collapse till the second World War, primarily because of their negative approach in industrializing their production process. However, what proved catastrophic for the producers, has turned beneficial for the collectors who have the chance to buy some very significant antique timepieces, the so called “English Victorian pocket watches” that were hand crafted around 150 years ago, equipped with original English mechanisms (even chronometer grade) of two preferable types. The full plate older ones with fusee and duplex escapement, and the newer  $\frac{3}{4}$  plate with going barrel and English lever escapement, without excluding mixed components per case. The structure of the market is messy, at least since the last quarter of the 19<sup>th</sup> century, and you need to develop a high expertise for identifying who supplies the mechanisms and the cases to whom (retailers included). That same period, several brands made the turn to machine-made watches and started using Swiss mechanisms.

#### Multi generation family businesses

Sixteen selected houses in alphabetical order: A.WEHRLE Cambridge 1858-1900s delivering many unbranded watches. C.FRODSHAM London since 1824 prominent and still present as an independent watchmaker. E.J.DENT London 1814 prominent and still present under unknown status. J.W.BENSON with a history starting in the mid-18<sup>th</sup> century, passing to machine-made production in 1892, ending up with destroyed facilities due to WWII in 1941. J.F.COLE London 1820-1880 considered one of the best watchmakers of the 19<sup>th</sup> century, with many patents on the escapement. J.CASHMORE London 1857-1900s being among the underrated ones. J.R.ARNOLD London 1784-1843 delivering 1,586 marine chronometers and more than 5,000 pocket watches & chronometers, approximately half of them in collaboration with DENT since 1812. LANCASHIRE Prescott 1888-1910 the only one established from the beginning for producing machine-made watches, for itself but also for G.J.GRAVES among others. NICOLE-NIELSON 1840-1888 delivering both watches and mechanisms to most of the other watchmakers listed herein. R.ROSKELL Liverpool 1803-1842 being one of the best watchmakers for pocket and marine chronometers. ROTHERHAM Coventry 1790 passing to machine-made production in the 1880s and recently resurrected. T.F.COOPER 1819-1880 delivering many watches to the American market, specialized in the use of duplex escapement. T.MERCER London 1870 being one of the best watchmakers for marine and pocket chronometers, and still active in the luxury range for table clocks. T.RUSSEL 1811 with successive generations remaining active till the 1990s. V.KULLBERG 1851 with Scandinavian origins being an awarded marine and pocket chronometer maker till his death in 1890, with his brand name remaining active till WWII.

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English Pocket Watches



Indicative photos sourced from [www.ebay.co.uk](http://www.ebay.co.uk)

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**GEORGE DANIELS Pocket Watches**

Dr. George Daniels (1926-2011) was a British master watchmaker, regarded as the greatest horologist of the 20<sup>th</sup> century and the founder of independent watchmaking like it has emerged in our times since the 1980s. His best contribution, among others, is the invention and development of the co-axial escapement since 1974, finally adopted by OMEGA in the 1990s. During his long career, he crafted almost entirely by hand 27 masterpiece watches, 4 wristwatches and 23 pocket watches. His endeavor was a continuous exercise to practice the artistry of the legendary watchmakers from the past applying his own methods and improvements. His first creation in 1953 was a marine chronometer, and in the next 50+ years, he made watches with all kinds of complications including chronographs, repeaters, one/four minute tourbillons, plus one grande complication timepiece.

**1970 Spring-Detent one-minute tourbillon.** This is one of the first watches with detent escapement (derived from marine chronometers) and retrograde hour.

**1976 Direct impulse 2-wheel escapement.** Based on Breguet “natural escapement” this application was developed in 1974 with the help of his friend Derek Pratt.

**1982 Space Traveler.** This is one of the “smartest” astronomic watches ever created measuring both the mean-solar and sidereal time, with calculated accuracy. It was built in two versions I & II (photo), equipped again with 2-wheel escapement. It was actioned in 2017 for the record price of 4.3 million USD.

**1987 Grand complication.** This is the most complicated watch ever built with coaxial escapement featuring one-minute tourbillon regulator, minute repeater, perpetual calendar, thermometer, time, etc. It was auctioned in 2019 for 2.4 million USD.



Photos sourced from [www.phillips.com](http://www.phillips.com)

GEORGE DANIELS Pocket Watches





### German Pocket Watches

Focusing on the second half of the 19<sup>th</sup> century, the protagonist names that contributed to the geographical shaping of the German industry are preferably four. Eppner brothers starting in the 1830s, producing pocket and marine chronometers in East Germany, with in-house movements since 1860s. Adolf Lange starting the saga of Glashutte in 1845. The establishment of JUNGHANS in 1861 in Pforzheim, credited with the most affordable qualitative German pocket watches of today, in particular those produced in the first quarter of the 20<sup>th</sup> century. W.BROCKING producing very fine marine style pocket chronometers in Hamburg, along with WEMPE later on since 1938. Overall Indicative prices, from less than 500 to over 5,000 euro for ALS.

#### Original Glashutte pocket watches

The “golden” period of Glashutte expands roughly from 1870 till the beginning of WWI. The timepieces crafted then with the characteristic  $\frac{3}{4}$  plate are among the best quality vintage pocket watches available today, something reflected in their price. Apart from the flagship brand of A.LANGE & SOHNE, there are also the grail timepieces (due to their rarity) of the famous independent local watchmakers such as Adolf Schneider, Ernst Kassiske, Julius Assmann, Moritz Grossman, Richard Glaeser. Especially ALS watches were produced in 3 quality grades, with the top one (1A) equipped with 20-jewel mechanism, with beryllium lever and balance (special antimagnetic), hand engraved balance cock and diamond endstone. All versions used gold14/18k cases around 52mm with enamel dial and usually golden hands, equipped with calibers of minimum specifications for 15-16 jewels, golden balance and lever of special design, swan neck regulator, adjustment to 5 positions. Thanks to the mediation of J.Durrstein, ALS presented an even lower grade version in 1878, the so called DUF (Deutsche Uhren Fabrikation) housed in gold14k cases, equipped with 15-jewel mechanisms, adjusted to 3 positions. J.Durrstein also produced his own more affordable watches in Glashutte under the brand UNION since 1893. The last testament of ALS was the WWII deck chronometer with power reserve.

#### German - Swiss collaborations

The reputation of Glashutte watches, along with their challenging prices, provided the incentive for the introduction of similar design qualitative watches, produced in Switzerland and imported to Germany. Durrstein Union Glocke, System Glashutte, Nomos are the three primary examples. ALPINA, incorporated in Glashutte since 1909, not only presented watches equipped with calibers supplied from Junghans, but also produced in Glashutte watches equipped with refined Swiss movements, the same type used by UROFA in TUTTIMA pocket watches since 1926.

ΦΣ

German Pocket Watches



Indicative photos sourced from [www.empress.cc](http://www.empress.cc) & [www.mokumwatches.com](http://www.mokumwatches.com)



### Japanese SEIKO Railroad Pocket Watches

Japanese railways, one of the most significant technological achievements in this very developed country, started their operations in 1872 and advanced in 4 stages, with turning points in the years 1906 when nationalization began, 1945 for the rebuilding after WWII, 1964 for the landmark of the first high speed rail line delivery before the Tokyo Olympic Games, 1987 when the privatization period began. During the first decades, they used watches coming from Elgin, Omega, Waltham, Zenith, up to 1929 when SEIKO released model TYPE-19 with a 7-jewel mechanism. Adopted within a few months as an official timepiece, and undergone all the necessary upgrades overtime, it remained in full service till 1971, for more than 40 years. In 1972, it was replaced by another mechanical model (61RW) equipped with Cal.6110, a hand wound version of the tested and trusted 61XX wristwatch line of mechanisms. In 1976, SEIKO presented the first quartz professional pocket watch (38RW) equipped with Cal.3870A, accurate within 10 seconds per month. Upgraded further on, it got its final specifications in 1998, equipped with Cal.7C21 that is used even today. For more than 90 years, all models feature big black Arabic numbers on white dial, based on the original Laurel brand model from 1913, with small or central second, and an approximate diameter of 50mm for the later versions. Despite being strictly distributed inside the Japanese market, they are sought after from enthusiasts and collectors worldwide.

#### MODELS' TIMELINE

1929...1931	Mechanical	Type-19 with 7 jewels 16S/43mm Base Metal
1932...1941	Mechanical	Type-19 with 15 jewels - H.Precision models (1939)
1945...1954	Mechanical	91RW Cal.9119 with 15 jewels
1955...1958	Mechanical	91RW with hacking second hand (Seconds Setting)
1959...1971	Mechanical	91RW with unbreakable mainspring (Diaflex)
1972...1978	Mechanical	61RW Cal.6110 with 21 jewels (standard hacking)
1976...1977	Quartz	38RW Cal.3870A accurate +/-10 seconds/month
1978...1986	Quartz	75RW Cal.7550A with 5J in service since 1980
1978...1980	Mechanical	63RW Cal.6310 with 17/21 jewels (hacking)
1987...1997	Quartz	SBVA001 Cal.7C11 with 7J-Ac.15s/m-HighMag.res.
1998...	Quartz	SVBR001 Cal.7C21 with 7J & 10 years battery life
2000...	Mechanical	SCVR001 Cal.8L34A with 20J L.E.3000pcs silver case
2007...	Quartz	SVBR02C Cal.7c21 with 7J L.E.2007pcs st.steel
2010s...	Quartz	SVBR003 Cal.7C21 with 7J for mass production SS
2014...	Quartz	SVBR005 Cal.7C21 with 7J L.E.850pcs st.steel
2019...	Quartz	SVBR007 Cal.7C21 with 7J L.E.1014pcs st.steel/YGP

SEIKO Railroad Pocket Watches



Indicative photos sourced from [www.plus9time.com](http://www.plus9time.com)





## OMEGA Pocket Watches

The brand saga book includes more than 400 editions, and this fact allows for the strong assumption that OMEGA has presented over time the largest collection of pocket watches in the market covering almost all existing types and categories since she has been involved in all the fields where evolution and timekeeping have been interconnected. The legendary Cal.19” introduced in 1894 had been the major asset for this extensive line of watches, but even more for the superb brand performance in the chronometry contests, from 1919 to 1971. Focusing on 3-hand timepieces, preferably there are 3 categories of major interest.

### Art Deco & Art Nouveau watches

The artistic and elegant smaller watches include more than 130 different patterns. This sub-line of usually silver or solid gold watches exists from 1896 till the end of Art Deco period in the 1940s, and includes both engraved and enameled watches of high artistic value. One very particular series is that of Niello creations on silver cases running for the first two full decades of the 20<sup>th</sup> century. A second very special sub-collection is the one devoted to hunting, with all timepieces fully engraved on silver cases, presented from the beginning till the 1920s.

### Railroad pocket watches

OMEGA started producing special railroad watches in 1895 under her sister brand GUNZELEN, fully respecting the American industry standards introduced two years before. These watches were equipped with top and chronometer grade calibers 19”/20” until the 1920s, supplied to railway companies in Argentina<sup>(131.20,137.20)</sup>, Ethiopia<sup>(237.19)</sup>, Rhodesia, South Africa, Switzerland, even US and Canada. Further on, these professional timepieces were equipped with calibers 38.5/40.6/43/960 since the 1930s, supplied to railway companies in Australia, Bulgaria<sup>(MA111/141LV)</sup>, China, Greece<sup>(MA1149 300pcs)</sup>, Serbia<sup>(MA164NR 60pcs)</sup>, Turkey, until 1971.

### “Goliath” 8-Day PR watches

These oversized pocket watches with diameter up to 8cm were primarily used in car dashboards and railroad companies, produced from the 1890s till the 1920s, under references 120.27/120.30/547.30. All had white enamel dials with big black roman or Arabic numbers and blued steel hands. The first ones anonymous, or signed with British retailer names (railroad), the later versions with “OMEGA - 8 JOURS” logo. Their major characteristic is the massive 15-17 jewels pin set caliber 30”/27” introduced in 1896/1898/1919 with 8 days power reserve (derived from one large mainspring barrel), considered the best of its kind in the market.

ΦΣ

OMEGA Pocket Watches



Indicative photos sourced from [www.ebay.co.uk](http://www.ebay.co.uk)



## **PATEK PHILIPPE Pocket Watches**

They are considered among the best investment items in the watch market, subjected to a very straight forward principle. The higher the price, the higher the return! PP does not produce only timepieces of top quality and craftsmanship, but it is one of the very few brands with the capacity to service and restore any watch, no matter how old it is, and this is a determinant factor for the value of her products. Focusing on the vintage pocket watches, thanks to the expertise of Jean Adrien Philippe, this manufacture was perhaps the first to present keyless stem wind and set pocket watches from the mid-19<sup>th</sup> century. Throughout her history, it has presented or even patented almost all the existing complications including all kinds of repeating functions, the perpetual calendar, the standard and split second chronograph, in addition to highly complicated models combining all the above functions. Besides her masterpiece work on complications, she was highly involved in the production of pocket chronometers and deck watches proving her devotion to horological excellence. The average collector is interested in the 3-hand watches like those presented below.

### **Chronometro Gondolo**

They were produced in the first three decades of the 20<sup>th</sup> century on the account of the Brazilian retailer Gondolo & Labouriau, upon certain specifications. Most cases are rose gold 18k with diameter of 50-56mm. The mechanism has 18-21 jewels with gold 9k wheel train, bi-metallic compensating balance and adjustment cam. The dial is enamel, the hour and minute hands gold 18k, the small second hand blued steel. Indicative price around 9,000 euro.

### **Art Deco style**

This type covers not only the timepieces produced in the 1920s and 1930s, but all the medium size models. Most watches have silver, steel, gold 18k or platinum cases with diameter around 44mm, equipped with top grade mechanisms. The dials are usually enamel or silver and the hands gold 18k or blued steel. Indicative price around 5,000 euro.

### **Small pocket watches**

The small watches with diameter around 33mm are preferably intended for conversion projects. Their small top grade mechanisms are fitted, along with the dial and hands, in medium cases providing for exceptional wristwatches, given a professional assembling work. Indicative price around 3,000 euro for the pocket watch, plus 1,000 euro for the NOP assignment (photo credit [www.pilguy.com](http://www.pilguy.com)).

ΦΣ

PATEK PHILIPPE Pocket Watches



Indicative photos sourced from [www.chrono24.com](http://www.chrono24.com)

## Vintage Wristwatches

Their history essentially starts with the “trench” watches supplied to the soldiers in the first World War. Passing through the Art Deco and Bauhaus influential periods of the 1920s and the 1930s, accepted all the necessary technological applications for meeting the adequate accuracy, shock and water resistance standards, and finally dominated the market, fully replacing the pocket watches after WWII. The first two decades (1910s-1920s) are regarded as an introductory period, the next two decades (1930s-1940s) represent the first development stage, and during the 1950s and 1960s, the market experienced the “golden years” of mechanical wristwatches.



**WWI hand wound military watches from DOXA and WALTHAM**

Indicative photos sourced from [www.ww1trenchwatch.com](http://www.ww1trenchwatch.com)



## Vintage Wristwatches

Focusing on the **1930s and 1940s**, these two decades are perhaps the most important for the collectors due to the rarity of selected timepieces and the explosive development of chronographs being the signature complication of those times. It is worth mentioning the TOP-10 brands of this period (in alphabetical order) considering their most significant wristwatch models.

1. BREITLING introduced Premier and Duograph (split-second) chronographs in the 1940s, equipped with Venus Cal.175/178/179/185, housed in 35-38mm cases.
2. GRUEN introduced its signature Curvex rectangular models in 1935, with Swiss "Precision" movements supplied by its own production facilities in Bienne.
3. HANHART presented its military mono-pusher 41mm chronograph in 1938, equipped with Cal.40, further developed to Cal.41/42(flyback) in 2-pusher models.
4. HEUER presented its best "big eye" 34-36mm chronograph models in the 1940s, in particular reference 2406, equipped with Landeron or Valjoux movements.
5. LONGINES introduced Cal.13ZN in 1936, used in some of the best chronographs of this period (ref. 4270) including central minute counter and flyback versions.
6. OMEGA presented Marine model in 1932, water resistant up to 135m and being historically the first commercial diving watch. Moreover, 33-36mm Chronometre dress models ref. 2254, 2365/66/67, 2499, 2500 were produced in 1941-1948 in an approximate volume of 28,000 pcs. Finally, 35-37mm chronographs ref.2381, 2277/78/79/87 are equipped with Cal.320/321 (Lemania-2310) since 1943.
7. PATEK PHILIPPE\* launched Calatrava line in 1932 with the preferable models being ref. 96, 565/570, 1509 housed in 31-35mm cases, in addition to the asymmetrical 23x39mm Motorist curved model 523/524 produced in 1936-1940.
8. ROLEX\* produced the rectangular Prince models in 1928-1940, equipped with Aegler Cal.877 being among the very first chronometer wristwatches in history.
9. UNIVERSAL GENEVE introduced the large Compax chronographs in 1936, plus Aero Compax later in 1940 being the first model indicating a 2<sup>nd</sup> time zone.
10. VACHERON CONSTANTIN presented in "tear drop" lug cases some of the most classic and elegant watches ever, like the 35mm chronograph ref. 4178 (280 pcs 1940-1964) and the 36mm minute repeater ref. 4261 (36 pcs 1942-1951).

(\*) PP complicated models and ROLEX "Bubble Back" are presented separately. Additional worth mentioning watches: (A) The iconic CARTIER Tank (1917) and JLC Reverso (1931). (B) The WWII military watches, preferably the so called "Dirty Dozen" series commissioned by the British MOD in collaboration with 12 brands. (C) The first "sport" watches introduced in the 1940s utilizing newly developed Incabloc (shock resistant) mechanisms, and usually featuring luminous dial and hands.

### Vintage Wristwatches



1930s Rolex Prince - Indicative photos sourced from [www.vintage-wristwatches.co.uk](http://www.vintage-wristwatches.co.uk)



1930s Omega Marine - Indicative photos sourced from [www.thenakedwatchmaker.com](http://www.thenakedwatchmaker.com)



1940s Vacheron Constantin MR 4261 - Indicative photos sourced from [www.hodinkee.com](http://www.hodinkee.com)

### Vintage Wristwatches



1930s Longines 4270 - Indicative photos sourced from [www.revolutionwatch.com](http://www.revolutionwatch.com)



1940s UG Aero Compax - Indicative photos sourced from [www.thosewatchguys.com](http://www.thosewatchguys.com)



1940s Omega 2381 - Indicative photos sourced from [www.omegaforums.net](http://www.omegaforums.net)





## Vintage Wristwatches

**PATEK PHILIPPE** complicated models from the 1930s and 1940s established its market status as the most prestigious brand overall, with its top vintage timepieces being coveted items from collectors worldwide. Examining this specific period, the most preferable watches are the first world-time models produced since 1937 and the best chronographs introduced during these two decades. Almost all these watches are addressed to top class collectors requiring at least six-digit budgets!

PP is credited with the first world-time wristwatch, thanks to the innovative design of Louis Cottier, developed since 1931. The first 5 such watches were presented in 1937 and two years later the “regular” model ref. 1415HU was introduced featuring a 24-hour inner ring moving clockwise along with the hands on the 12-hour dial, in addition to an outer rotating ring with engraved cities, adjusted by hand. It is estimated that the model 1415HU was produced in a volume of 115 pcs until 1954, equipped with Cal.12-120HU, housed in small gold 31mm cases including one and only platinum piece, few pieces featuring artistic cloisonné enamel dials, and a unique chronograph version displayed in the brand museum.

PP is also credited with the first split-second wrist chronograph (rattrapante or double chronograph in other words) featuring an additional superimposed independent hand for counting seconds, activated by a dedicated pusher. Developed by Victorin Piguet (the company behind PP grande complications) and presented in 1923, it initiated an impressive collection of vintage chronographs ever since. Examining this line chronologically, primarily thanks to “the complete guide” article of Wei Koh ([www.revolutionwatch.com](http://www.revolutionwatch.com)), there are five models worth listing herein.

1. Ref.130 with 30 min counter, produced in 1936-1964 (circa 1,500 pcs) housed in 33mm steel, gold, or even steel-gold cases.
2. Ref.530 with 30 min counter, produced in 1937-1944 (only 62 pcs) housed in larger 36.5mm steel (rare) or gold cases.
3. Ref.1436 being the split-second edition of ref.130, produced in 1938-1971 (circa 140 pcs) also housed in steel or gold 33mm cases.
4. Ref.1463 the so called “Tasti Tondi” with 30 min counter, produced in 1940-1965 (circa 750 pcs) housed in steel or gold 35mm cases. It is the first water resistant chronograph of PP and one of the most elegant and classic for the 20<sup>th</sup> century.
5. Ref.1563 being the split-second edition of ref.1463, produced in 1947 (only 3 pcs)

This list is not inclusive but representative. All these models are equipped with Cal.13-130 based on Valjoux-23 historical movement, modified/upgraded per case.

### Vintage Wristwatches



PP 1415HU - Indicative photos sourced from [www.phillips.com](http://www.phillips.com) & [www.hodinkee.com](http://www.hodinkee.com)



PP 1436 - Indicative photos sourced from [www.sothebys.com](http://www.sothebys.com)



PP 1463 - Indicative photos sourced from [www.phillips.com](http://www.phillips.com) & [www.hairspring.com](http://www.hairspring.com)

## Vintage Wristwatches

**ROLEX** presented the first waterproof automatic watches in the line Oyster Perpetual that was introduced in 1933 and kept in production until 1955 remaining in history with the nickname “Bubble Back” (BB) due to their thick domed case back design facilitating the placement of the first mass produced automatic movement used in wristwatches. This is Cal.620 presented in 1931 and developed by Emile Borer, technical director of Aegler SA that had been diachronically an affiliated company responsible for the development and production of Rolex mechanisms, in exclusive collaboration since 1936 (completely merged in 2004). This innovative mechanism includes a detached automatic rotor, mounted on the hand wound 9.75 Cal.600 featuring 17 jewels and running at 18,000 BPH (beats per hour) with circa 40 hours power reserve. The complete movement height is 7.4mm naturally affecting the overall thickness of the watch case. Successive movements used in BB line are Cal.520/530 since 1936 and Cal.630 since 1937, plus shock resistant Cal.730/740 (the last one with date) since 1945 and Cal.635/645/775 since 1950 (photo - [www.rolex.com](http://www.rolex.com)).

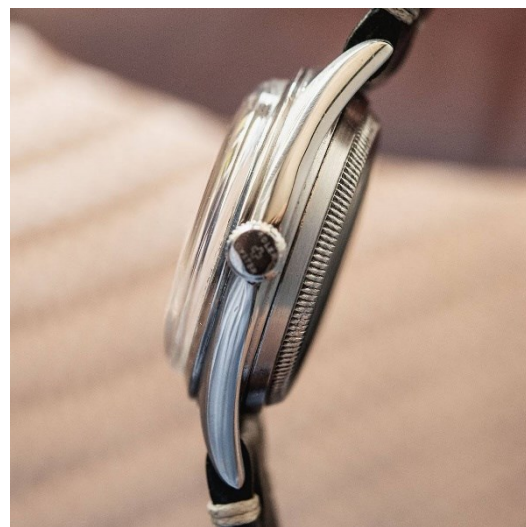


There have been more than seventy (70) reference numbers in the BB timeline (starting with model 1858), housed in steel, gold (all grades 9k/14k/18k), or even steel-gold cases with the standard size being around 32mm. Since 1941, small female 30mm models were introduced using Cal.420, and four years later (1945) Rolex presented the big (jumbo) BBB models in 35-36mm cases, usually featuring date function, like ref.4467 that is accepted as the first Datejust edition. The most preferable standard BB models are 2940, 3065, 3130, 3131, 3133, 5011, 6050, 6084, 6085, and the most preferable BBB models are 5028, 6029, 6098, 6298 and 6352.

### Vintage Wristwatches



BB Ref.3133 Cal.635 - Photos sourced from [www.cool-auction.net](http://www.cool-auction.net)



BBB Ref.5028 Cal.730 - Photos sourced from [www.bulangandsons.eu](http://www.bulangandsons.eu)



## Vintage Wristwatches

The **CHRONOGRAPHS** introduced especially in the 1940s belong to the top selections of vintage wristwatches, for high/top class collectors. Among all these models, there is a relatively small number, equipped with column-wheel split second mechanisms, in particular Valjoux Cal.55VBR or Venus Cal.179/185/190(MP). It seems that both movements were introduced in the same year (1942) and kept in production until the early 1950s running inside several brand models. These rattrapante (double) chronographs, more or less unknown “rare birds” in the market, stand for the hidden treasure of watchmaking in the 20<sup>th</sup> century!

Valjoux Cal.55VBR is a large (mono-pusher per case) movement 39x8mm, derived from Cal.26 that had been used in pocket chronographs since the early 1910s. It had been installed in very large cases (44-45mm) and used indicatively (along with other Valjoux calibers) by Eberhard, Heuer, Hugex, Leonidas, Minerva. Above all, the two most significant models historically that used this caliber are the legendary Rolex 4113 (only 12 pcs produced in 1942) and the military 24-hour model HA-1 produced by Universal Geneve in 1953 (less than 100 pcs) on the account of the Italian outlet A.Cairelli that was a contract supplier to the Italian Ministry of Defence.

Venus mechanism is smaller 32x8mm (well fit in 35-38mm cases) featuring top quality specs like glucydur balance (anti shock per case), produced from a company specialized in chronograph movements since 1933 (the line 170 was introduced in 1936). Cal.179 features 30-minute counter whereas Cal.185 additionally features 12-hour counter. It was used by many brands like Beyer (moonphase Cal.190), Breitling, Certina, Eberhard, Eska, Excelsior Park, Grana, Helvetia, Juvenia, Record, Tourneau.



Indicative photos sourced from [www.watchesbysjx.com](http://www.watchesbysjx.com) & [www.hodinkee.com](http://www.hodinkee.com)

### Vintage Wristwatches



Indicative photos sourced from [www.watchesbysjx.com](http://www.watchesbysjx.com) & [www.hodinkee.com](http://www.hodinkee.com)



Indicative photos sourced from [www.watchclub.com](http://www.watchclub.com) & [www.watchguru.com](http://www.watchguru.com)



Indicative photos sourced from [www.fratellowatches.com](http://www.fratellowatches.com) & [www.phillips.com](http://www.phillips.com)

## Vintage Wristwatches

During the **1950s and 1960s**, the watch industry experienced significant investments on a post war re-birth and development effort, and the first purpose-built watches were presented, for diving, racing, etc. Among the most preferable ones from these two decades, are the alarm wristwatches developed by VULCAIN (Cricket since 1947), JAEGER LE COULTRE (Memovox since 1951) and several other brands using AS hand wound movements since 1954 (circa 1.4 million watches). Above all, the two perhaps most collectible watches of this period are the 36mm Pilot model IWC MK-XI produced from 1948 until 1983, equipped with Cal.89, and the ZENITH models equipped with Chronometre Cal.135 produced from 1948 till 1962 (circa 11,000 pcs).



Indicative photos sourced by [www.tmvintage.co.uk](http://www.tmvintage.co.uk) & [www.watchpool24.com](http://www.watchpool24.com)



## Vintage Wristwatches

This presentation includes a selection of 21 brand entries, for 2/3-hand mechanical wristwatches primarily from the **1960s and 1970s**, capable to sustain daily use, for those who appreciate vintage. These watches are available in the pre-owned market through internet, and any experienced and capable technician could provide adequate service and restoration, even a potential upgrade if worth attainable.

**MECHANISM:** No matter the origin of the watch, the caliber should be disassembled and cleaned properly, with all critical parts checked and replaced if necessary and possible. Afterwards, it is reassembled, oiled and regulated meeting normal standards for daily use. Old mechanical movements, despite their quality and tolerance, could not be guaranteed for absolute precision. An owner of a vintage timepiece should accept a daily deviation up to 60 seconds, with the regulating control limit set to 20-30 seconds during servicing and the final testing.

**CASE:** All cases should be cleaned thoroughly. Stainless steel ones are polished or brushed, whereas base metal ones could be treated with CERAKOTE being perhaps the most affordable alternative. The same application is used for color changing, along with stoning. The crystal is usually replaced with after-market mineral or sapphire, and the solid back is optionally engraved by laser, or even by hand! All gaskets (even the crown if necessary) are replaced, and finally the watch is tested per case for water resistance up to 1-3ATM (10-30 meters), with no guaranty provided however for water submergence, only for being splash proof.

**DIAL & HANDS:** Dials should be carefully checked before purchase since re-conditioning is expensive (not cost effective). If subjected to severe wear and tear, they could be artistically hand painted! Hands are usually replaced with after-market qualitative ones respecting the original design, without excluding potential improvements.

**STRAP:** Each and every watch should be delivered with a brand new very good quality (even handmade) leather or stainless steel strap per case.

Every vintage watch is a particular item highly appreciated! This is why we should promote qualitative service and added value over discounted pricing. Filenios targets to deliver few restored vintage watches per year dealing exclusively with the models presented in the following pages. Each timepiece demands approximately work of two-three months for complete overhaul, and should be certified with the proper documentation. Saving, maintaining and in general working on old-vintage timepieces is a creative and rewarding challenge!



## ΦΣ

**BIFORA 130/STRATOS & 115/OLYMPIA (1964-1982)**

BIFORA founded in 1900 is considered one of the best manufacture companies of West Germany during 1960s and early 1970s, and the hand wound mechanisms Cal.115/130 are perhaps the most representative of this brand, produced from 1964 till 1982. The best models fitted with these calibers are “Olympia” and “Stratos” without ignoring other models with the same mechanisms. Most cases are not made of stainless steel and require Cerakote treatment.

**CASE:** Stainless steel or base metal approximately 35-36mm

**CALIBER:** Hand wound operating at 5 b/sec (reserve 45-50h) with 17 jewels

**BUDGET:** 250 - 500 euro Including purchase and overhaul



Indicative photos sourced from [www.chrono24.com](http://www.chrono24.com) and EBAY

## ΦΣ

**GUB GLASHUTTE SPEZIMATIC & SPEZICHRON (1964-1985)**

GUB founded in 1951 at Glashutte is the manufacture company representing East Germany from early 1950s till late 1980s. Automatic Spezimatic mechanism Cal.74/75 produced in 1964-1980 (approx. 3,7 mil.units) is the most representative of the brand, fitted in some very characteristic square cases. The successor caliber 11-26/11-27 produced in 1978-1985 has been the last commercial caliber of the brand. Most cases are not made of stainless steel and require Cerakote treatment.

**CASE:** Stainless steel or base metal approximately 35-36mm

**CALIBER:** Automatic operating at 5/8 b/sec (reserve 37h) with 26/22 jewels

**BUDGET:** 500 - 750 euro Including purchase and overhaul



Indicative photos sourced from EBAY and [www.zeitauktion.com](http://www.zeitauktion.com)

## ΦΣ

**PRIM DIPLOMAT & SPORT (1965-1993)**

PRIM company founded in 1949 and registered as a brand in 1950s representing Czechoslovakia back then (Czech Republic today), introduced the dress model Diplomat in 1965, along with the hand wound Cal.66/68 (ETA based), followed by the Sport “diving” model in 1969. These watches remained in production for more than 20 years, till the split of the country due to the “Velvet Revolution” in 1993, and they are considered among the best presented in the “Eastern Bloc” countries.

**CASE:** Stainless steel or base metal approximately 34-36mm

**CALIBER:** Hand wound operating at 5 b/sec (reserve 40h) with 17 jewels

**BUDGET:** 250 - 500 euro Including purchase and overhaul



Indicative photos sourced from EBAY

## ΦΣ

**RAKETA BIG ZERO (1983-2009)**

The watch model affiliated with “Perestroika” had been produced from RAKETA in Saint Petersburg - Russia (but also in Besancon - France) for more than 25 years till the end of 2000s and the brand renovation in 2011, equipped with Cal.2609HA, perhaps the best and most reliable mechanism presented during the Soviet Union era. The model had been introduced with white or black dial, with Cyrillic or English text, and is considered a very representative Soviet origin wrist watch.

**CASE:** Primarily base metal chrome/gold plated approximately 39mm

**CALIBER:** Hand wound operating at 5 b/sec (reserve 45h) with 17/19 jewels

**BUDGET:** 250 - 500 euro Including purchase and overhaul



Indicative photos sourced from EBAY

## ΦΣ

**SEIKO 5 DX-SPORTS-ACTUS (1967-1976)**

These models are perhaps the most representative SEIKO 5s ever appeared in this model timeline since 1963 possessing all the 5 characteristics of this particular entry level brand line that are (a) stainless steel case, (b) water resistant, (c) protected crown at 4 position, (d) shockproof automatic mechanism, (e) day/date function. Their most significant common characteristic is the use of Cal.6106/6119, among the best SEIKO mechanisms of that period produced in three different (A/B/C) grades.

**CASE:** Stainless steel approximately 37-43mm

**CALIBER:** Automatic operating at 6 b/sec (reserve 46h) with 17-25 jewels

**BUDGET:** 250 - 500 euro Including purchase and overhaul



Indicative photos sourced from [www.chrono24.com](http://www.chrono24.com)

## ΦΣ

**CITIZEN EAGLE 7 & NEW MASTER (1974-2000+)**

Eagle 7 model was introduced in 1974 along with the automatic mechanism MIYOTA 8200, one of the best basic calibers ever, with continuous production till today in 2020s. More affordable than its rival SEIKO-5 model, it has been kept in circulation till the 1990s and beyond. New Master model is the most common available equipped with the hand wound versions Cal.8260/8270 of the same movement, and it is found today in perhaps the most affordable vintage watches worth buying.

**CASE:** Stainless steel approximately 34-38mm

**CALIBER:** HW/Automatic operating 6 b/sec (reserve 43h) with 17/21 jewels

**BUDGET:** 200 - 400 euro Including purchase and overhaul



Indicative photos sourced from [www.twobrokenwatchsnobs.com](http://www.twobrokenwatchsnobs.com) and EBAY



## **GRAND SEIKO & KING SEIKO**

### **MECHANICAL HAND WOUND (1963-1969)**

Implementing a smart strategy, SEIKO group operated with two major production facilities since the 1930s, Suwa Seikosha Co in Nagano and Daini Seikosha Co in Tokyo. The first supported primarily the sub-brand GRAND SEIKO since its establishment in 1960, and the second supported primarily the sub-brand KING SEIKO introduced in 1961. Both entities produced mechanical watches till the early-middle 1970s, and their internal competition resulted in the best quality Japanese watches of that era, with a clear target of being competitive to the Swiss luxury brands.

#### **GRAND SEIKO 57GS**

It is the second GRAND SEIKO model presented in 1963 (with quick set date function) and kept in production till 1969, with an estimated volume above 80,000 timepieces. Almost all watches are stainless steel (with very few “cap gold” and gold18k), with diameter approximately 36mm excluding the push/pull crown, water resistant to 50m, equipped with the top quality chronometer grade hand wound mechanism Cal.5722 (35 jewels), A and B versions operating in 5 b/sec and 5.5 b/sec respectively, with 47 hours power reserve. The current commercial price is around 1,750 euro for the stainless steel model, and more than 15,000 euro for the extremely rare gold18k model. It is considered by many as the best Japanese dress timepiece of the 20<sup>th</sup> century, in par with the respective top quality Swiss watches.

#### **KING SEIKO 44KS**

It is the second KING SEIKO model presented in the late 1963 (no date function) and kept in production till 1968 being a more affordable substitute to GRAND SEIKO 57GS. All watches are stainless steel (some being gold plated), with diameter approximately 35-36mm excluding the push/pull crown, equipped with the top quality hand wound mechanism Cal.44 (25 jewels) operating in 5 b/sec, with 47 hours power reserve. In 1964 a chronometer model was presented, equipped with Cal.4420 (27 jewels) and kept in production for two years till 1966. Finally, a model with quick set date function was presented in 1965, equipped with Cal.4402 (25 jewels). The current commercial price is around 750 euro for the standard models, and around 1,500 euro for the chronometer model. A top quality timepiece, perhaps the “best value for money” vintage Japanese watch available in the pre-owned market.

GRAND SEIKO & KING SEIKO





## ΦΣ

**ARMY MOVEMENT 1130/6325 MODELS (1960s-1970s)**

Watches from various brands equipped with the mechanism AS 1130 or UNITAS 6325, plus their derivative versions (CORTEBERT 734). These Swiss calibers are called “army movements” because they were first used in the watches ordered from the German army (Wehrmacht) during WWII, and they have very similar specifications. They had been produced at enormous quantities for at least four decades till 1970s, and even today are fitted in brand new models, either as used or new old stock (NOS) reworked calibers, or even reproduced with improved materials. The watches selected use calibers with sock protection and usually originate from 1960s and 1970s.

**CASE:** Stainless steel or base metal approximately 35-36mm

**CALIBER:** Hand wound operating at 5/6 b/sec (res.41/47h) with min 17 jewels

**BUDGET:** 250 - 500 euro Including purchase and overhaul



Indicative photos sourced from [www.chrono24.com](http://www.chrono24.com) and EBAY



### WEST END SOWAR PRIMA AUTOMATIC (1970s-1990s)

WEST END is one of the most significant middle range Swiss brands, founded in 1886 and focusing from the very beginning in its dominant distribution in India and later in the rest of Asia and Middle East, with a time long introduction of military style models like Sowar Prima, first appeared in 1940s. These watches have been equipped with automatic Cal.ETA-2778/2836/2846/72/78/79 since early 1970s, with a production volume of several million timepieces till the end of the 20<sup>th</sup> century.

**CASE:** Stainless steel approximately 34-36mm

**CALIBER:** Automatic operating at 6/8 b/sec (reserve 40-48h) with 17-25 jewels

**BUDGET:** 250 - 500 euro Including purchase and overhaul



Indicative photos sourced from [www.chrono24.com](http://www.chrono24.com) and EBAY

$\Phi\Sigma$ **CERTINA DS/DS-2 (1960-1976)**

CERTINA DS (Double Security) was introduced in 1959 as one of the first purposefully robust built models in the market. Along with in-house mechanism Cal.25-65/25-66 (first produced in 1960) and its derivatives, it remained in production for more than 15 years, with the successor larger model DS-2 introduced in 1968 and being the only one with hand wound mechanism. It is estimated that the total production volume of both model versions is more than 600,000 timepieces.

**CASE:** Stainless steel (including gold plated) approximately 36/38mm

**CALIBER:** HW/Automatic operating at 5.5 b/sec (res.44h) with 17/27/28 jewels

**BUDGET:** 500 - 750 euro Including purchase and overhaul



Indicative photos sourced from EBAY

## ΦΣ

**TISSOT PR-516 (1965-1972)**

TISSOT PR-516 was introduced in 1965, inspired by the automotive world as a very characteristic casual/sport model that has been in production for more than 50 years, and keeps evolving. In 1960s and 1970s, it was equipped with the last TISSOT in-house mechanisms Cal.781-1/782-1/783-1/783-2/784-1/784-2, produced till 1972 in hand wound and automatic versions. Perhaps the most distinguished middle range Swiss wrist watch model ever appeared in the market.

**CASE:** Stainless steel (including gold plated) approximately 34-36mm

**CALIBER:** HW/Automatic operating at 5 b/sec (res.45-49h) with 17/21 jewels

**BUDGET:** 500 - 750 euro Including purchase and overhaul



Indicative photos sourced from EBAY

$\Phi\Sigma$ **ENICAR SHERPA & OCEAN PEARL (1962-1975)**

ENICAR founded in 1913 is among the few major Swiss brands that had not overcome the “quartz crisis” and has not been re-established. Sherpa and Ocean Pearl lines introduced in 1956 and 1957 respectively, include several models in multiple designs, equipped with in-house mechanisms Cal.1120/1140/1160 and their derivatives since 1962. Today, these qualitative and representative from 1960/70s vintage watches are very sought after among collectors and enthusiasts.

**CASE:** Stainless steel (including gold plated) approximately 34-37mm

**CALIBER:** HW/Automatic operating at 5/6 b/sec (res.44h) with 17-33 jewels

**BUDGET:** 500 - 750 euro Including purchase and overhaul



Indicative photos sourced from [www.chrono24.com](http://www.chrono24.com) and EBAY

## ΦΣ

**LONGINES ADMIRAL & CONQUEST SPORT (1970-1976)**

A selection of 2 robust models from perhaps the best high range brand of modern times, produced in the first half of the 1970s decade, with reference numbers 23XX and 15XX, equipped preferably with the high frequency (HF) in-house mechanisms Cal.6651(automatic), 6922/6942/6952 and 706 for Conquest line. Almost fifty years old reliable timepiece for everyday use, among the most affordable high quality wrist watches of that era.

**CASE:** Stainless steel (including gold plated) approximately 35-37mm

**CALIBER:** HW/Automatic operating at 6/8 b/sec (res.37-40h) with 17/25 jewels

**BUDGET:** 500 - 1000 euro Including purchase and overhaul



Indicative photos sourced from [www.passions.com.sg](http://www.passions.com.sg) and [www.catawiki.com](http://www.catawiki.com)

## ΦΣ

**ZENITH AUTOSPORT/SPORTO/DEFY (1964-1978)**

ZENITH cushion sport models first appeared in 1964 with the introduction of Autosport, equipped with Automatic Cal.2542. Three years later in 1967, the same design was presented as the Sporto model, equipped with the hand wound version of the same mechanism, and in 1969 the Defy model (water resistant up to 300m) was introduced being the predecessor of the luxury sport watches. All these models were produced till the late 1970s (est. 750,000+ pcs) equipped with Cal.2552/62/72.

**CASE:** Stainless steel (including gold plated) approx. 33-36mm (Defy excl.)

**CALIBER:** HW/Automatic operating at 6/8 b/sec (res.46-50h) with 17-25 jewels

**BUDGET:** 750 - 1250 euro Including purchase and overhaul (Defy excl.)



Indicative photos sourced from EBAY



### OMEGA GENEVE TONNEAU (1965-1970)

OMEGA introduced the Geneve tonneau model in 1965, equipped with automatic mechanisms Cal.552 and Cal.565. Three years later in 1968, the same case design was equipped with the hand wound Cal.601. All models remained in production till 1970, with an approximate volume of 500,000 timepieces. Perhaps the most underestimated and affordable high quality OMEGA model, equipped with the best in-house mechanisms (around 6 mil. pcs produced) of this brand in the 20<sup>th</sup> century.

**CASE:** Stainless steel (including gold plated) approximately 35mm

**CALIBER:** HW/Automatic operating at 5.5 b/sec (reserve 48h) with 17/24 jewels

**BUDGET:** 750 - 1250 euro Including purchase and overhaul



Indicative photos sourced from [www.chrono24.com](http://www.chrono24.com) and EBAY





## ROLEX OYSTER PERPETUAL (1957-1988)

It is the most successful and versatile “all-around” model in history, water resistant to 100m and equipped with Cal.1530 one of the best ROLEX automatic mechanisms, available since 1957. The same movement family including Cal.1520/60/65/70/75 remained in production till 1988, along with Air-King 5500 model covering a period of 30+ years. Additional sub-models include the plain OP and the Datejust produced till 1977, with an estimated total production volume of more than 3 million watches.

**CASE:** Stainless steel approximately 34-36mm

**CALIBER:** Automatic operating at 5/5.5 b/sec (res.44h) with 25/26 jewels

**BUDGET:** 3000 - 5000 euro Including purchase and overhaul



Indicative photos sourced from EBAY



## TUDOR OYSTER PRINCE AUTOMATIC (1969-1994+)

ROLEX sibling brand introduced the first automatic Oyster Prince model 7909 in 1952 equipped with FEF-380 mechanism. The best OP substitutes though are the Date+Day models 7017/19/20 from 1969, equipped with AS-1895 caliber. Later in 1974, models 94500/510/613/614 were equipped with ETA-2834. The only other differences with ROLEX OP are the lower WR (50m) and the steel grade from the mid-80s. 1994 Models 76200/213/214, along with 74000N, have sapphire crystals.

**CASE:** Stainless steel approximately 34-39mm

**CALIBER:** Automatic operating at 6/8 b/sec (res.40h) with 21/25 jewels

**BUDGET:** 2500 - 4000 euro Including purchase and overhaul



Indicative photos sourced from [www.chrono24.com](http://www.chrono24.com)

## ΦΣ

**JAEGER LECOULTRE GEOMATIC (1961-1970)**

Produced in a limited number of around 2,000 stainless steel (E399) and 2,300 gold18k (E398/399) timepieces, Geomatic is considered one of the best vintage JLC dress watches, for its elegant design, big case for the 1960s, above all its top quality automatic mechanism. It is equipped with the manufacture calibers K881G and K883S (stop seconds - introduced in 1969 - available in YG and SS models) chronometer grade and adjusted to 5 positions.

**CASE:** Gold 18k or stainless steel approximately 36mm

**CALIBER:** Automatic operating at 5.5 b/sec with 23 jewels COSC

**BUDGET:** 3500 - 4500 euro Including purchase and overhaul



Indicative photos sourced from [www.chrono24.com](http://www.chrono24.com)

$\Phi\Sigma$ **IWC YACHT CLUB (1967-1976)**

IWC introduced Yacht Club with a cushion gold 18K case in 1967 (later on with stainless steel). A robust watch equipped with automatic Cal.854/8541, one of the best Swiss mechanisms ever appeared. The final “grail” model versions in middle 1970s were equipped with the legendary in-house hand wound Cal.89, produced for 30 years from 1946 to 1976. Along with the same brand Ingenieur model, perhaps the best wristwatches of their time across the board.

**CASE:** Gold 18K or stainless steel approximately 36mm

**CALIBER:** HW/Automatic operating at 5/5.5 b/sec (res.44h) with 17-25 jewels

**BUDGET:** 3000 - 6000 euro Including purchase and overhaul



Indicative photos sourced from [www.ninanet.net](http://www.ninanet.net) and EBAY

## ΦΣ

## Ultra-Thin Mechanical Wristwatches

The development of ultra-thin mechanisms and consequently pocket and wrist watches has been a major trend of the 20<sup>th</sup> century, and keeps going being a particular field in today's horology. It requires advanced technical skills and excellent craftsmanship in the production of extremely thin calibers up to 2mm height, or even their integration on the case! Traditionally, the 4 protagonist brands in this segment are AUDEMARS PIGUET, JAEGER LECOULTRE, VACHERON CONSTANTIN and PIAGET. The first three collaborated in the early 1950s for the production of AP Cal. 2003 (introduced in 1953) and VC Cal.1003 (introduced in 1955) being the thinnest mechanism of its time with height 1.64mm and remaining in production for 50 years till 2003 (resurrected by VC in 2015). Later on, in 1957, PIAGET presented Cal.9P with height 2mm as the first step in the development of Altiplano line and her establishment as a specialized watchmaker in ultra-thin timepieces. Focusing on the vintage watches of these three brands, their obvious characteristic is their very small dimensions (approx. 32x5mm) that is deterrent for buyers with large wrists. One practical solution is the use of leather straps with backing pad.

**CASE:** Gold 18k approximately 32-34mm

**CALIBER:** Hand wound operating at 5/5.5 b/sec (res.30-36h) with 17/18 jewels

**BUDGET:** 3000 - 6000 euro Including purchase and overhaul



PIAGET Cal.9P - Indicative photos sourced from [www.chrono24.com](http://www.chrono24.com)

### Ultra-Thin Mechanical Wristwatches

#### AUDEMARS PIGUET & VACHERON CONSTANTIN



Indicative photos sourced from [www.chrono24.com](http://www.chrono24.com)



## **New Old Projects (NOP)**

FILENIOS is emphatically involved in the assembling of new watches with old mechanisms, a really challenging work when done properly. This is a relatively new trend after 2010, and considering the huge availability of orphaned calibers from abandoned vintage watches, this particular market segment is perhaps the most promising, especially for all small independent workshops and micro-brands. One challenging question is if such projects result in the manipulation of old watches, especially pocket watches that are destroyed for the salvage of their calibers. The logical answer is that pocket watches of insignificant value, or the ones that need extensive overhaul, could be fairly transformed to historical usable wrist watches, for the benefit of both the watch maker and the buyer.

### **Anonymous & artistic**

The fitting of an old caliber in a new case is a task that could be accomplished by any skilled watch technician, and profoundly such individual projects have initiated this tendency of the so called “marriage watches”. The slang market language uses the term “franken watches”, for the excessive skeletonizing and conversion in the calibers, with potential effect on the functionality and credibility of the final watches presented. The weak point of such projects is that they lack the necessary standards and prerequisites of a complete professional work. The small workshops most often work on old pocket calibers, without sock protection meaning that such timepieces require careful use, in addition to the negative characteristic that these calibers end up to extremely big cases, not appreciated by a considerable part of the market. The last resort for those engaged in such projects is the artistic character of their watches, and indeed there are very impressive designs materialized from very creative watch enthusiasts.

### **Special models & specialized micro-brands**

Apart from the unbranded timepieces, there are NOP works coming from established brands that normally fit NOS unused small calibers in special models following the same production process used for their brand new watches. These projects are very much appreciated among collectors, and this is why the watch prices are relatively higher than the tags of the respective standard line models. Finally, there are very few established micro-brands specialized in the introduction of NOP watches, with exact specifications and a highly admired professional work. These small independent micro-brands are the forefront keepers of the watch heritage and tradition, especially for those who could not afford the very expensive historical vintage watches.

## ΦΣ



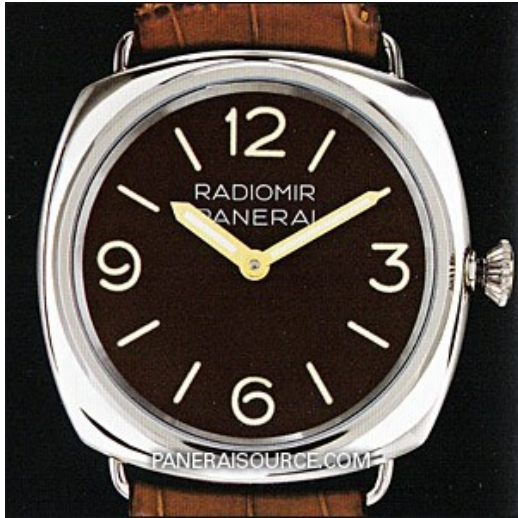
Swiss brand IWC Ref.325 model first presented in 1939 being the first branded wristwatch with pocket mechanism (Cal.74 produced in 1913-1931) fitted in a case of 43mm. According to IWC, in total 690 such watches were produced till 1981, equipped with calibers 74,98,982 being the predecessors of the Portuguese model (Photos [www.chrono24.com](http://www.chrono24.com))



Swiss brand IWC Portuguese Ref.4551 anniversary (125 years) and limited edition model (1750 pcs) presented in 1993 with modified (shock protection) pocket mechanism Cal.9828, first produced in 1930s as Cal.98 and refined in 1967 as Cal.982, fitted in a stainless steel case of 42mm (Photos [www.watchprosite.com](http://www.watchprosite.com))



## ΦΣ



Italian brand PANERAI most expensive limited edition (60pcs) Radiomir model PAM021 presented in 1997 with Swiss mechanism ROLEX/CORTEBERT-618 first produced in the late 1930s fitted in a platinum case of 47mm (Photos [www.panerainsource.com](http://www.panerainsource.com))



Italian brand PANERAI limited edition (230pcs) Radiomir chronograph model PAM163 presented in 2003 with Swiss mechanism VALJOUX-234 first produced in 1974 fitted in a stainless steel case of 44mm (Photos [www.panerainsource.com](http://www.panerainsource.com))



Swiss brand MAURICE LACROIX Masterpiece model with refined chronograph mechanism VENUS-188 produced in 1948-1966 fitted in a platinum case of 40mm (Photos [www.watchuseek.com](http://www.watchuseek.com))



Swiss brand MAURICE LACROIX Masterpiece Reveil model with refined alarm mechanism AS-1931 produced in 1970-1974 fitted in a stainless steel case of 36mm (Photos [www.catawiki.com](http://www.catawiki.com))

## ΦΣ



Swiss brand MINERVA anniversary model with refined in-house manufactured pocket mechanism Cal.22 first produced in 1920s fitted in a stainless steel case of 43mm (Photos [www.ninanet.net](http://www.ninanet.net))



Swiss brand MINERVA anniversary model with refined in-house manufactured mechanism Cal.48 first produced in 1943 fitted in a gold18k case of 40mm (Photos [www.chrono24.com](http://www.chrono24.com))

## ΦΣ



Swiss brand ARMAND NICOLET OHM model LS8 with skeletonized mechanism UNITAS-600 first produced in 1950s fitted in a stainless steel case of 43mm (Photos [www.mywatchmart.com](http://www.mywatchmart.com))



Swiss brand ARMAND NICOLET OHM model L15 with refined automatic mechanism AS-1883, first produced in 1960s fitted in stainless steel cases of 38mm (Photos [www.ablogtowatch.com](http://www.ablogtowatch.com))

## ΦΣ



[www.uhrenfreund.com](http://www.uhrenfreund.com)



[www.uhrenfreund.com](http://www.uhrenfreund.com)

German brand SINN model 6066 with modified Swiss alarm mechanism AS-5008 produced in 1973-1977 fitted in a stainless steel case of 39mm (Photos [www.uhrenfreund.com](http://www.uhrenfreund.com))



German brand NIVREL model with refined Swiss chronograph mechanism LANDERON-248 produced in 1937-1970 fitted in a stainless steel case of 42mm (Photos [www.nivrel.com](http://www.nivrel.com))

## ΦΣ



German/Swiss brand CHRONOSWISS model Regulateur with Swiss Cal.122 (modified ENICAR-165 from 1970s) first introduced in 1991 fitted in a stainless steel case of 38mm (Photos [www.monochrome-watches.com](http://www.monochrome-watches.com))



Hour hand model by the German independent watchmaker RAINER NIENABER with modified/refined Swiss mechanism UNITAS-6325 first produced in 1940s fitted in a stainless steel case of 37mm (Photos Filenios archive)



Swiss brand DUBOIS FILS model DBF006 with mechanism FELSA-4007N produced in the 1950s fitted in a stainless steel case of 42mm (Photos [www.duboisfils.ch](http://www.duboisfils.ch))



Swiss brand CATOREX model with refined mechanism AS-2063 produced in 1969-1978 fitted in a stainless steel case of 40mm (Photos [www.catorex.swiss](http://www.catorex.swiss))



German brand CIRCULA Heritage model with German mechanism PUW-1661 produced in 1977-1979 fitted in a stainless steel case of 41mm (Photos [www.circulawatches.com](http://www.circulawatches.com))



German re-established brand BIFORA limited edition model with in-house refined mechanism Cal.115 produced in 1967-1982 fitted in a stainless steel case of 39mm (Photos [www.bifora.de](http://www.bifora.de))





Russian watchmaker ALEXANDER SHOROKHOFF has established his own brand in Germany, along with POLJOT INTERNATIONAL since 1990, with the primary scope being the presentation of watches equipped with refined mechanisms of Soviet origin like POLJOT-3133/2612/2627 (Photos [www.poljot24.de](http://www.poljot24.de))

## ΦΣ



Finn independent watch maker TORSTI LAINE classic column wheel Swiss made chronograph model with extensively refined/optimized mechanism VALJOUX-22, produced in a period of 60 years from 1914 to 1974, fitted in a stainless steel case of 42mm (Photos [www.monochrome-watches.com](http://www.monochrome-watches.com))



Swiss independent watchmaker SPEAKE MARIN column wheel chronograph model with refined mechanism VALJOUX-88, produced in 1947-1974, fitted in the characteristic "Piccadilly" brand designed stainless steel case of 42mm (Photos [www.speake-marin.com](http://www.speake-marin.com))

## ΦΣ



British micro-brand PRECISTA homage to Czech Air Force model with mechanism AS-1130 produced in 1940s fitted in a stainless steel case of 41mm  
(Photos [www.timefactors.com](http://www.timefactors.com))



British micro-brand PRECISTA homage to Fifty Fathoms model with mechanism AS-2063 produced in 1969-1978 fitted in a stainless steel case of 42mm  
(Photos [www.timefactors.com](http://www.timefactors.com))

## ΦΣ



British micro-brand LOOMES model with refined/modified English SMITHS-12.15 mechanism first produced in 1946 fitted in a stainless steel case of 39mm (Photos [www.hodinkee.com](http://www.hodinkee.com))



Italian micro-brand GOGGIOLA model created by Sebastian Salvado with refined English pocket mechanism J.PRESTON crafted in 1890s fitted in a bronze hand-made in-house case of 40mm (Photos [goggiolawatch.com](http://goggiolawatch.com))

## ΦΣ



US independent watchmaker RGM custom model with refined American HAMILTON grade 923 pocket mechanism produced in 1937-1949 fitted in a stainless steel case of 42mm (Photos [www.watchcarefully.com](http://www.watchcarefully.com))



German watch engraver BENZINGER custom model with refined and skeletonized American ELGIN grade 543 pocket mechanism produced in 1940-1955 fitted in a stainless steel case of 42mm (Photos [www.watchcarefully.com](http://www.watchcarefully.com))



US micro-brand RPAIGE one off wristwatches with refined American pocket mechanisms from the early 1990s fitted in stainless steel cases of 44mm (Photos [www.totaldesignreviews.com](http://www.totaldesignreviews.com))



US micro-brand RPAIGE WRocket LE project with ELGIN or WALTHAM pocket mechanisms fitted in stainless steel (199 pcs) or titanium (99 pcs) cases of 44mm (Photos [www.bgwatch.com](http://www.bgwatch.com))

## ΦΣ



US micro-brand VORTIC model with refined American ILLINOIS 274 grade pocket mechanism from 1926 fitted in a titanium in-house case of 46mm  
(Photos [www.watchwabi.com](http://www.watchwabi.com))



US micro-brand VORTIC model with refined American ELGIN 315 grade pocket mechanism from 1938 fitted in a titanium in-house case of 46mm  
(Photos Filenios archive)

## ΦΣ



US micro-brand WILSON WATCH WORKS model with refined American HAMILTON grade 917 pocket mechanism from 1941 fitted in a stainless steel case of 42mm (Photos Filenios archive)



Canadian micro-brand BARRINGTON GRIFFITHS model with refined Swiss pocket mechanism BULOVA-AH17 (ETA-951) produced in 1935-1953 fitted in a stainless steel in-house manufactured case of 42mm (Photos [www.bgwatch.com](http://www.bgwatch.com))



$\Phi\Sigma$ 

Among all the NOP projects that have been presented so far, perhaps the most impressive are the ones utilizing the split-second chronograph caliber Venus 179/185, thanks to a significant NOS quantity of movements being available since the late 1980s. These historical calibers, produced in the 1940s and 1950s, have been refined or even reworked by at least 10 established brands like Atelier De Chronometrie Barcelona, Cedric Johner, De Bethune, Excelsior Park, Franck Muller, Girard Perregaux, Lucien Rochat, Panerai, Parmigiani, Paul Picot, Telda, Ulysse Nardin using this mechanism in approximately 400 contemporary timepieces (in total). Needless to say, these collectible watches are very rare and expensive.



ΦΣ



Photos sourced from [www.atelierdechometrie.com](http://www.atelierdechometrie.com)



Ulysse Nardin - Photos sourced from [www.macautimemuseum.com](http://www.macautimemuseum.com)



Paul Picot - Photos sourced from [www.goldentimeco.com](http://www.goldentimeco.com)

$\Phi\Sigma$ 

### Unbranded watches & the NOP Tradition in Eastern Europe

The overall presentation herein is indicative of the activity in New Old Project works, primarily in Eastern European countries like Bulgaria, Czech Republic, Hungary, Poland and Russia, among others. Above all Ukraine, with many skilled technicians involved in several independent workshops in Kiev and Kharkov. Like mentioned before in the introduction of NOP watches, the outcome of all this activity should be subjected to careful examination and consideration, especially when the prices requested are high. On the one hand the work on the mechanism itself is very critical, on the other hand the assembling of the final watch is a very demanding process, and this is the reason that the technicians engaged in successful and qualitative projects are respectable.

The two major considerations concern the very large size of these watches and their adequacy for wearing them on the wrist. There is a number of “standard” stainless steel cases built particularly for NOP assembling, and in the following photos, one of the best such cases available in 46mm diameter (thickness 11mm) is worn on a 200mm (7.9in) wrist. This wristwatch is equipped with LONGINES pocket Cal.19.80 from 1918, with original enamel dial and original inflamed blue steel hands. Such watches are intended only for occasional use, however used continually (early morning to late evening) for exactly one week testing period in December 2020 by an active individual, the daily deviation was within one minute per day that is a fully acceptable rate, rather a theoretical standard, for vintage pocket mechanisms fitted in wrist watches. More or less, this performance is indicative for a very good and honest work delivered by any skilled technician involved in such projects, but also for the fabulous engineering of all these mechanisms being more than 100 years old.







Unbranded projects from the American "tarostik" EBAY shop, with mechanisms GIRARD PERREGAUX (1900s), IWC Cal.77 (1921), OMEGA Cal.960 (1971), fitted in stainless steel cases of 44mm (Photos EBAY)



Unbranded projects from the Czech “Timeless Watches” studio, with pocket mechanism OMEGA (1914), and mechanisms IWC Cal.62 (1947), ULYSSE NARDIN, fitted in stainless steel cases of 48/45/38mm (Photos [www.thetimelesswatches.net](http://www.thetimelesswatches.net))

## ΦΣ



Unbranded projects from the Czech "midsummerman" EBAY shop, with pocket mechanisms AUGUST SALZMAN (1880), chronograph LE PHARE (1900), skeletonized TACY (1925), fitted in stainless steel cases of 48mm (Photos EBAY)

## ΦΣ



Unbranded projects from the German “yevgen” EBAY shop, with pocket mechanisms HEBDOMAS-8DAYS (1900), LONGINES Cal.19.74 (1926), GUSTAV SCHULZE / DURRSTEIN (1915), fitted in stainless steel cases of 48mm (Photos EBAY)



## ΦΣ



Unbranded projects from the Hungarian “euro-curios” EBAY shop, with pocket mechanisms OMEGA (1920), IWC Cal.97 (1930), LONGINES Cal.18.89 (1935), fitted in stainless steel cases of 42/44mm (Photos EBAY)

## ΦΣ



Unbranded projects from the Polish "bgm" EBAY shop, with PATEK PHILIPPE mechanisms from around 1880 (pocket quarter repeater) and 1890, fitted in stainless steel cases of 45/38/36mm (Photos EBAY)

## ΦΣ



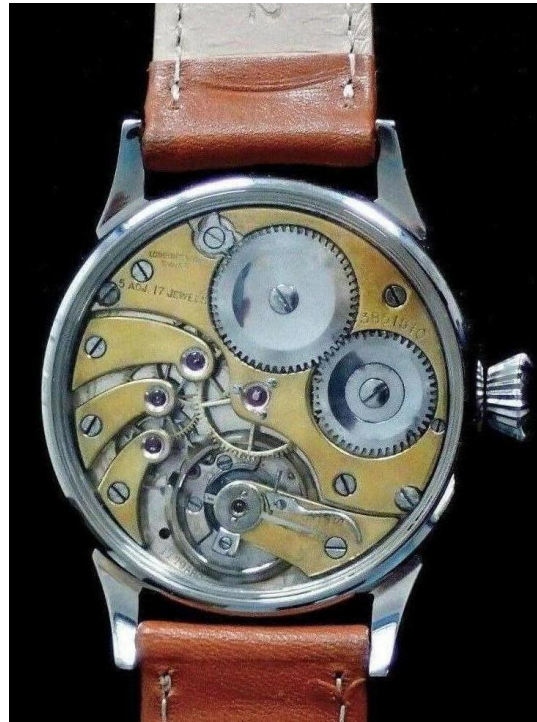
Unbranded projects from the Polish “datowatches” EBAY shop, with pocket mechanisms PATEK PHILIPPE from around 1900 fitted in gold 14 cases of 46mm, and ROLEX from around 1930 fitted in stainless steel cases of 48mm (Photos EBAY)



Unbranded projects from the Polish “tkristof” EBAY shop, with IWC pin pocket mechanism Cal.65 produced in 1898-1919 and pocket mechanism Cal.67 first produced in 1930s, both fitted in stainless steel cases of 48mm (Photos EBAY)



Unbranded projects from the Russian "customwatchstore" EBAY shop, with pocket mechanisms P.BUHRE and H.MOSER from 1890s, and ANGELUS alarm from 1910s, fitted in stainless steel cases of 45/48mm (Photos EBAY)



Unbranded projects from the Russian "Landry Big Time" studio, with pocket mechanisms LONGINES (1900) and VACHERON CONSTANTIN (1890) fitted in stainless steel cases of 45/43mm (Photos [www.oldswisswatch.com](http://www.oldswisswatch.com))



Unbranded projects from the Ukrainian "Patina Original" studio, with artistically treated OMEGA pocket mechanisms produced in 1900s – 1910s, fitted in stainless steel cases of 48mm (Photos [www.patina-original.com](http://www.patina-original.com))



Unbranded projects from the Ukrainian "Wandolec Art" studio, with H.MOSER chronograph pocket mechanism from 1920s fitted in stainless steel case of 40mm, and artistically treated LONGINES pocket mechanism from 1900s fitted in stainless steel case of 48mm (Photos EBAY)





Unbranded projects from the Ukrainian "CherryUAStore" ETSY shop, with pocket mechanisms E.KOEHN (1895), ROLEX (1920), GLASHUTTE/ALS (1925), fitted in stainless steel cases of 48mm (Photos ETSY)



Unbranded projects from the Ukrainian "chronometre" ETSY shop, with pocket mechanisms OMEGA produced in 1900s – 1910s, fitted in stainless steel cases of 48mm (Photos ETSY)



Unbranded projects from the Ukrainian "keeperofcoins" EBAY shop, with 1920s pocket mechanisms SYSTEM GLASHUTTE, ILLINOIS artistically treated, LE COULTRE skeletonized, fitted in stainless steel cases of 48mm (Photos EBAY)



Unbranded projects from the Ukrainian "smahane" EBAY shop, with artistically treated pocket mechanisms CARTIER, LE COULTRE, OMEGA, fitted in stainless steel cases of 48mm (Photos EBAY)



Unbranded projects from the Ukrainian "Sergiy Pankush" ETSY shop, with pocket mechanisms E.HOWARD (1912), plus artistically treated ROLEX (1920s) and LE COULTRE (1940s), fitted in stainless steel cases of 42/43/48mm (Photos ETSY)



Unbranded projects from the Ukrainian “world\_antique” EBAY shop, with German pocket mechanisms GLASHUTTE/ALS and J.ASSMANN produced around 1900s, fitted in stainless steel cases of 48mm (Photos EBAY)



FILENIOS projects for anonymous watches, with Swiss mechanisms MSR-T44 skeletonized first produced in 1968, FHF-96 and ETA-2500 produced in 1960s, CORTEBERT-616 produced in 1930s, fitted in stainless steel cases of 40/36/44mm

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Epilogue with EPOS ref. 3340, an awarded model introduced in 2004, equipped with Hebdomas 8-day power hand wound mechanism, among the first with the very characteristic inverted balance bridge, produced in various versions from the late 19<sup>th</sup> century up to the late 1970s, used in all kinds of watches through the late 2000s



Photo sourced from [www.keptlight.com](http://www.keptlight.com)

George Serafimides