



PAGÈS

Régulateur à détente RP1



The beginning of 2022 is marked by the presentation of the third creation of independent watchmaker Raúl Pagès: the Régulateur à détente RP1. Entirely developed and manufactured in his workshop in Les Brenets (Switzerland), it is equipped with a brand-new precision movement with a pivoted detent escapement with anti-tripping device. This escapement is the Holy Grail of precision chronometry and its miniaturisation in the format of a wristwatch is a rare feat. With its characteristic dial, this timepiece pays tribute to the emblematic precision regulators that Raúl Pagès reinterprets here in a contemporary aesthetic. An exclusive piece that combines tradition, precision and beauty, all values dear to its creator.





## The Régulateur à détente RP1 in detail

### The Pagès Régulateur à détente: technicality, quality and tradition

As a true master craftsman, Raúl Pagès has entirely conceived, designed and produced the Régulateur à détente RP1 with his own hands in his workshop in Les Brenets (Switzerland). This exceptional timepiece meets the most demanding criteria of traditional fine watchmaking and handcrafting.

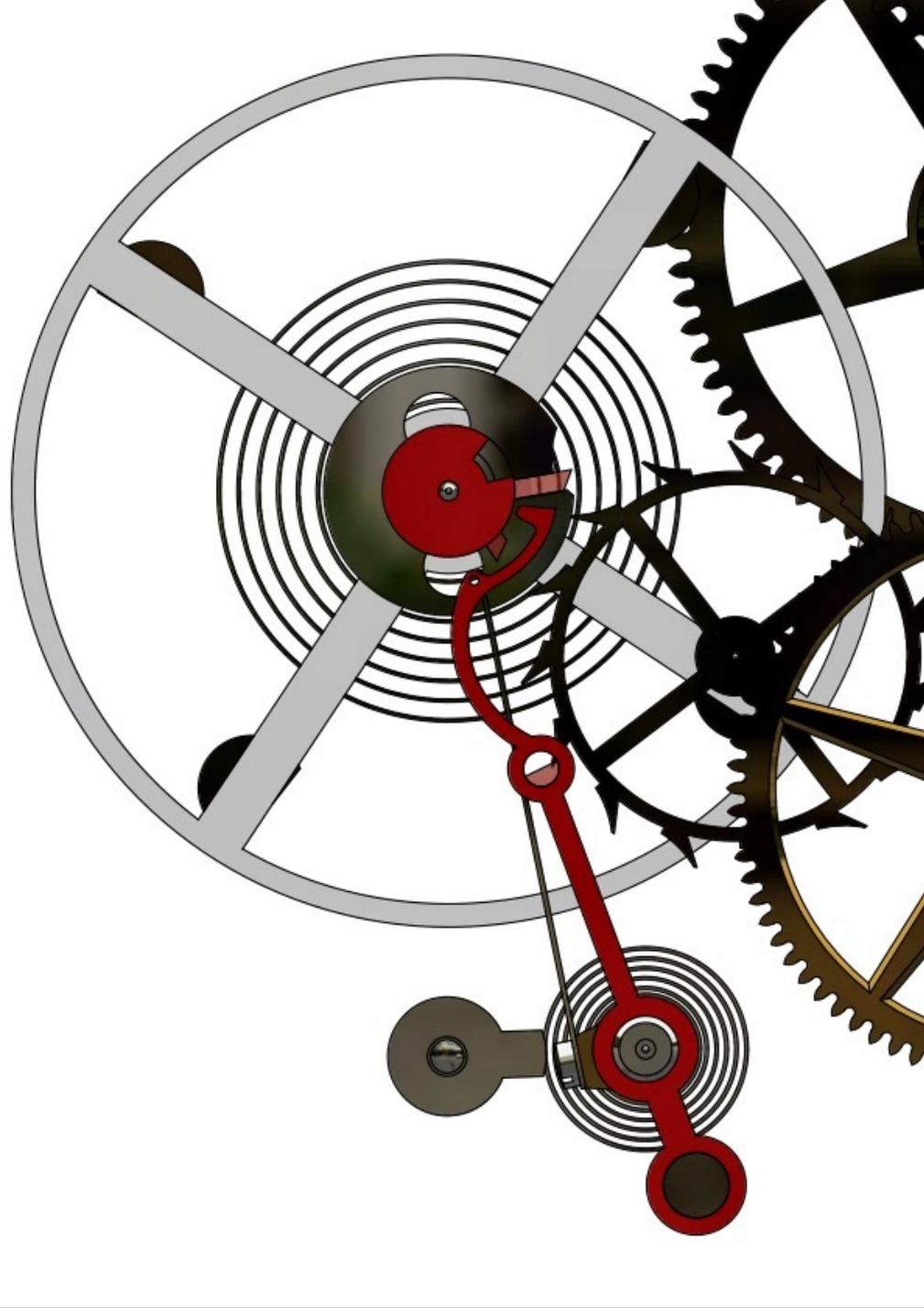
Equipped with a brand new calibre fitted with a pivoted detent escapement, the Régulateur à détente RP1 is in line with the tradition of exceptional chronometers. The great precision of the movement is matched by the choice of display: the regulator. An iconic dial of high-level chronometry, the regulator offers its own space for each of its hands: hours, minutes and seconds. Each indication thus has its own dial. The three hands follow their own rhythm to give an extremely precise time indication. The minutes hand dominates and enlivens the centre of the dial, while the hours and seconds are located at 12 and 6 o'clock respectively - or rather at 60 and 30 minutes. Elegance, purity and the detent escapement were the three key words that came to Raúl Pagès' mind when he created this new calibre. Technically, the detent escapement is said to be "free" because the balance is not subjected to any stress during its additional arc. The advantage of this system, compared to the traditional Swiss lever escapement, is that the escape wheel transmits its force directly to the balance wheel, giving it a much better mechanical efficiency.

The movement: outstanding and entirely designed and produced in-house

### A technical tour de force

The Régulateur à détente RP1 movement is a major accomplishment in terms of miniaturisation and horological craftsmanship. This new calibre houses the rarest and most difficult escapement to make: the pivoted detent escapement. Extremely rare in today's world, Raúl Pagès has not only designed this escapement himself but also hand-made it. This movement is therefore doubly "in-house", since not only the ébauche but also the regulating organ are made in-house. This escapement alone defines the Régulateur à détente RP1 and gives it its letters of nobility. The entire architecture of the calibre has been designed to house it in the best possible way and to give it maximum emphasis. Thus, Raúl Pagès has opted for a unique construction, positioning the seconds wheel on the dial side of the main plate. This judicious choice confers an innovative and mysterious aspect to the movement, as the kinematic chain appears to be interrupted. In addition, this technical trick allows a masterful view of the escapement wheel and the perfect positioning of the detent bridge. Equipped with a gold counterweight, the pivoted detent has been optimised to be particularly well balanced and thus meet modern chronometric requirements. Raúl Pagès has of course also addressed and solved the major problem faced by the detent escapement in a wristwatch: shock resistance. The Régulateur à détente RP1 is therefore equipped with a patented system that prevents the escape wheel from leaving the rest position when the watch is shaken.





To this end, the detent is equipped with a beak, which cooperates with a third roller on the balance shaft. In the event of a shock, the beak of the detent rests on the roller and thus prevents the escapement from tripping. The low frequency (18,000 vibrations per hour) of the large 13.30 mm-diameter balance wheel enables every detail of the escapement's operation to be appreciated. The balance wheel is equipped with a Breguet balance spring with a Philips terminal curve, which allows the balance spring to deploy concentrically. Adjustment weights in 18k gold allow the fine adjustment of the rate by modifying the inertia of the balance wheel.

To understand the extreme complexity of this escapement, one need only examines the detent unlocking spring, which is only 0.02 mm thick. What is more, this spring is entirely formed by hand. Finally, its adjustment must be extremely meticulous because even a slightly too high tension would immediately stop the balance wheel.

## Exceptional finishings

The architecture of the movement and the finishings are not to be overlooked. Numerous drawings were made in Raúl Pagès' sketchbook and, like a sculptor, tests were carried out "file in hand" before finding the ideal layout and shape of the bridges. Special attention was also paid to the choice of materials and finishes for each of the bridges and the main plate. Both the detent and balance wheel bridges are made of mirror-polished steel and each has four inward angles. Their extreme openwork design provides an exceptional view of the escapement. The other bridges are made of nickel silver, frosted and bevelled. Each anglage is then entirely polished by hand with gentian wood. This exceptional finishing enhances the inward and outward angles while sublimating the play of light of the movement's curves.

All 171 elements of the watch enhance the traditional know-how of fine watchmaking and show extreme care thanks to the hand-made finish. Every component, visible or not, is bevelled, polished, satin-finished or circular-grained by hand.

An example of mastery in the craft, the entire gear train is countersunk, bevelled and circled on both sides. The barrel has a circular-grained cover and a snailed drum, while the interior is polished.

The finishing of the ratchet and crown wheel is also breath-taking. Each tooth, each screw sinking is bevelled and polished, contrasting beautifully with the matte finish of the frosted surface. The steel click, mirror-polished and hand-bevelled, is a reference to the most noble and complicated historical pocket watches.

Such operations require prodigious expertise and know-how, particularly for the hand decoration of all the parts.





### The dial: a technical and modernist composition

Passionate about art history and architecture, Raúl Pagès pays tribute to the modernist forms and colours sublimated by the famous architect Le Corbusier. The dial features a unique architectural and chromatic composition.

The minute divisions are cantilevered, bringing lightness to the flange. Its black colour contrasts with the main plane and allows a clear reading of the minutes. The seconds dial has an outer diamond polished chamfer and is set back from the main plane. Its blue colour is called cerulean blue 59 and represents, in the iconography of Le Corbusier, the sky and the sea; it comes from his colour palette Polychromie Architecturale created in 1959.

The hour ring is beautifully circled and has diamond polished edges, inside and out.

The handmade hands are also beautifully rounded and polished, and the domed fixing screws give the elegance of 19th century precision timepieces to the dial.

This subtle play of depth and colour creates a refined architecture full of subtlety, a constant found in previous Raúl Pagès creations.

## The case: a harmonious design

Perfectly adjusted to the movement, the case reflects the refined and modern aesthetic of Soberly Onyx, Raúl Pagès' first timepiece. While maintaining the sobriety that made it so successful, the case diameter has been changed to 38.5 mm. Raúl explains it this way: "The dimensions of the case follow the classic principles of architectural aesthetics. It's all about proportions. The relationship between the bezel, the lugs and the dial allowed me to give this case perfect proportions".

The finish of the case is also brilliantly interpreted: The top of the lugs, the bezel and the case back are polished, while the case middle is satin-finished, giving the Régulateur à détente RP1 case a contrast and alternation of subtle and technical surface-finishes. The choice of the sapphire crystal, known as "glass box", is also noteworthy, bringing three-dimensionality and sensuality to the touch of the piece.

The lugs screwed to the case middle of this timepiece also refer to the technicality of traditional marine chronometers, clearly making the Régulateur à détente RP1 an unusual piece that perfectly combines tradition and modernity.





## Profile of Raúl Pagès

**Raúl Pagès, independent watchmaker, designer, artist**

Raúl Pagès is an independent Swiss watchmaker (movement designer and restorer). In 2005 he obtained his diploma of watchmaker-restorer in antique watchmaking with honours, then in 2006 his diploma of designer in watch complications at the CIFOM in Le Locle. For more than 15 years he has been working on the restoration of horological masterpieces belonging to the most prestigious collections in the world. This technical and historical expertise allow him today to offer masterpieces that perfectly combine tradition and modernity.

In 2012, he decided to set up his own workshop in order to manufacture entirely by hand the 352 components of his now iconic "Tortue" automaton. Building on this experience, he embarked on the manufacture of a limited series of 10 pieces "Soberly Onyx", his first timepiece, in 2016.

In 2017, he also became a member of the Académie Horlogère des Créateurs Indépendants (AHCI).

As an accomplished musician, and a lover of art history and 20th century design history, Raúl Pagès explores the time measurement and its history as a multi-faceted artist. A rigorous and meticulous technician, he innovates and designs exceptional watchmaking mechanisms.

## The regulator and the detent escapement, some historical references

The regulator appeared in the 18th century and is considered the emblem of all precision clocks. It marked the beginning of a new era in which time was measured to the nearest second. With its emblematic dial, which historically served as a reference and standard for setting the time of watches, the regulator is synonymous with exceptional timepieces in watchmaking history.

Presented to the Academy of Sciences in 1748 by Pierre Leroy, the detent escapement became essential when maritime nations competed for the construction of the most accurate mechanical time instrument possible, allowing the most reliable determination of the geographical position at sea. This is why this escapement is found in marine chronometers and precision pocket watches.

## Technical specifications

### Display

Sandblasted, diamond and nickel-plated dial

Black nickel-plated minutes flange

Diamond-polished, circular-grained and rhodium plated hours flange

Seconds dial matt lacquered, cerulean blue 59

Hardened steel hands: chamfered, rounded-off and polished

Domed and polished fixing screws

### Case

Material: 316L stainless steel

Polished bezel, top of lugs and back

Satin-finished case middle

Bevelled and polished lug screws

Dimensions: 38.5 mm x 10.2 mm (with sapphire crystal)

Between lugs: 19mm

Water resistance: 3 atm - 30m - 100 ft

Sapphire crystal with anti-reflective coating, bezel and caseback

### Movement

In-house movement with manual winding

Escapement: pivoted detent with anti-tripping system

Balance: variable inertia with four 18K gold weights

Dimensions: 33.6 mm x 5.6 mm

Power reserve: 47 hours

Number of jewels: 17

Number of components: 171

Balance frequency: 18,000 vibrations per hour / 2.5 Hz

Component materials: nickel silver and steel

Treatments: nickel plating and gold plating

Finishing: haute horlogerie, hand-made

### Strap and buckle

Supplied with two hand-stitched straps in black and beige leather with blue stitching, fitted with bars featuring a tool-free removal system.

316L stainless steel buckle with "Pagès" logo engraving



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