SCIENCE OF MOVEMENT

ARMIN STROM

MIRRORED FORCE RESONANCE

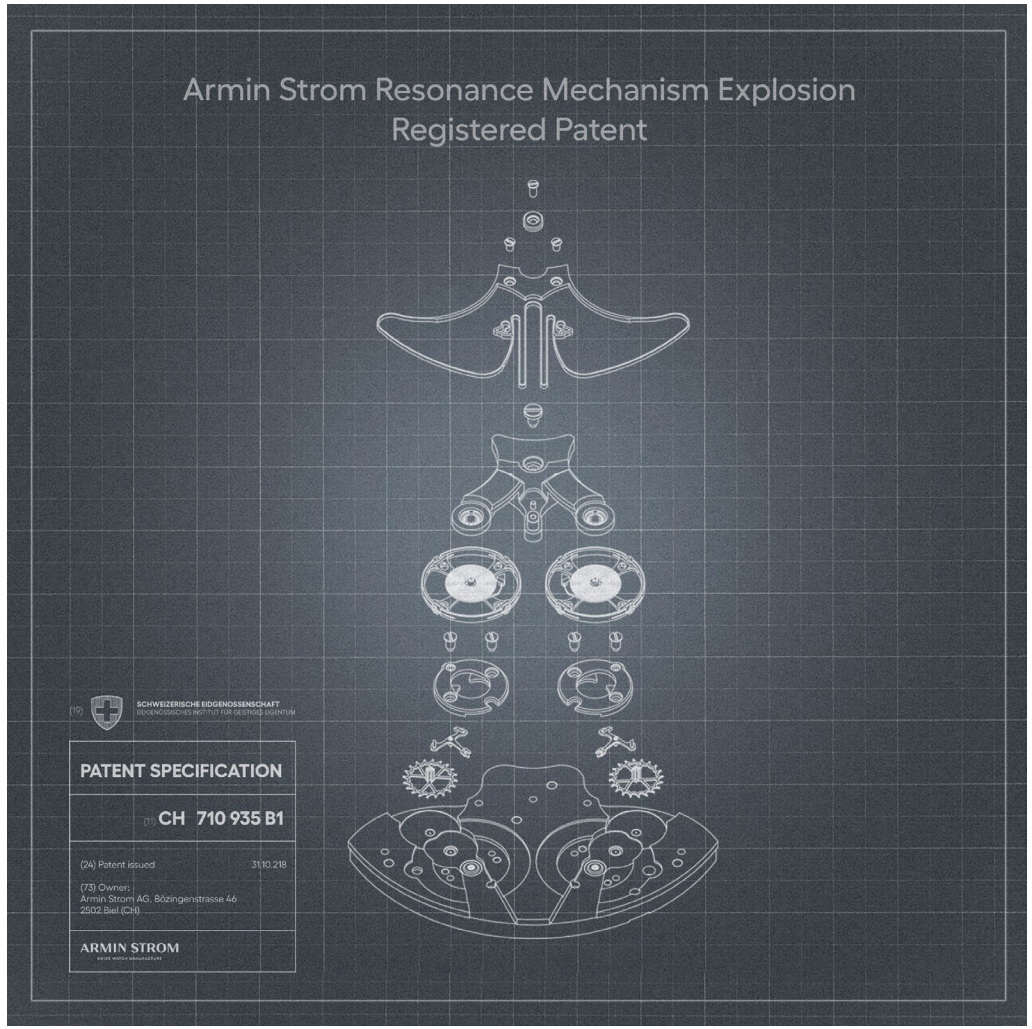
ZEITGEIST 1665

ARMIN STROM INTRODUCES THE MIRRORED FORCE RESONANCE ZEITGEIST 1665

The Zeitgeist imagines what a Resonance wristwatch might have looked like had it been achieved centuries ago — when resiliently-maintained Resonance had the potential to alter the course of human history. As such, it's a 'relic from a future that might have been' but never was.

This new interpretation of the Zeitgeist offers a further exploration of how leading watchmakers of the past might have aesthetically interpreted the Resonance Phenomenon if they could have both solved the Resonance Fragility Problem and envisioned the concept of a 'wrist watch'. Conceived with a 'future imagined from the past' ethos, this new Zeitgeist offers a creative vision of an imagined horological history that never was.

The Zeitgeist incorporates the Armin Strom Manufacture's milestone achievement of stable and resilient Resonance in a slim and refined 43mm case; combining technical depth with optimal everyday wearability. It definitively achieves the longstanding horological ambitions for Resonance Synchronization that originated with Christiaan Huygens's clock experiments in 1665.



Background

ARMIN STROM's breakthrough achievement, stable and resilient Resonance, had been pursued since the 17th century by watchmaking pioneers like Christiaan Huygens because of its potential to deliver chronometric consistency — the gain or loss of precisely the same number of seconds each day, without fluctuation. Marine navigators of Huygens's era were desperate for chronometric consistency so they could more accurately calculate longitude at sea. Despite the efforts of some of history's most iconic watchmakers, chronometric consistency wasn't achieved when it was needed most — because the Resonance Fragility Problem rendered Resonance timepieces unsuitable for the rigours of oceanic travel. Resonance simply couldn't be maintained in dynamic, real-world conditions — until 2016. That's when Armin Strom's Claude Greisler, inspired by the suspension system found in Antide Janvier's 18th-century Resonance Clock, introduced the first wristwatch to achieve Resonance with near-absolute resilience against disruption. Certified by the Centre Suisse d'Electronique et de Microtechnique (CSEM), ARMIN STROM's patented solution actively mitigates torque fluctuations to maintain synchronization in the most challenging environments, including the human wrist.

Historical Context

Longitude historically required consistent, not perfect, timekeeping — because predictable daily variations could be factored into calculations of longitude. Back when navigators calculated longitude at sea by comparing the local “solar noon” (when the sun was highest) with the time at a known reference point, the potential for Resonance to deliver timekeeping consistency would have revolutionized navigation and saved many lives by improving Longitude calculations — but only if it could have been achieved with resiliency against disruption. As noted by Sir Isaac Newton in his speech to Parliament in 1714 establishing the Board of Longitude, “By reason of the motion of the ship, the variation of heat and cold, wet and dry, and the difference of gravity at different latitudes, such a watch hath not yet been made.” Had Christiaan Huygens successfully developed his Resonance Sea Clock in the 1600s, with the necessary resiliency against disruption, the Longitude Problem could have been effectively solved over a hundred years before John Harrison presented his H4 marine chronometer in 1759. Initially spurred by promises of great wealth offered by various European governments who sought a resilient chronometric solution for improved maritime navigation, the watchmaking challenge of harnessing Resonance resiliently remained elusive for four centuries, until Armin Strom’s Claude Greisler finally solved it in 2016 with the introduction of our first Resonance timepiece.


ARMIN STRÖM

A Milestone in Resonance Watchmaking

In horology, the Resonance Phenomenon — known in physics as Huygens Synchronization — occurs when two balance wheels influence each other via the exchange of subtle, almost imperceptible vibrations and enter into a state of synchronized oscillation. Physicists describe this phenomenon as “shared modes of motion.” The benefit lies in oscillation rate stability. Resonance can prevent typical timing errors ordinarily caused by wrist motion, gravity, temperature shifts, and mild shocks. Depending on the design, a Resonance timepiece can deliver timekeeping precision, chronometric consistency, or both. Chronometric consistency means that a watch gains or loses exactly the same number of seconds each day, without variation. How well this Resonance Synchronization is maintained in fact depends on the technical solution, with Resonance timepieces being historically plagued by The Resonance Fragility Problem. That refers to how poor resilience against disruption had rendered the chronometric benefits of Resonance Synchronization intermittent, unpredictable, and unquantifiable. In prior movement architectures, the balance wheels tend to repeatedly drift apart in response to wrist motion and mild shocks, and then draw each other back into alignment — without the predictability required for any quantifiable chronometric benefit. Armin Strom’s patented Resonance Clutch and Resonance Suspension System sustain the Resonance phenomenon continuously and predictably, ensuring both chronometric precision and timekeeping consistency.


ARANETROM
Zeitgeist
SWISS MADE
STAINLESS STEEL
MICRO GEO ROTOR
3ATM

Exemplary Hand-finishing: Every component counts, even the parts you don’t see.

At Armin Strom, hand-finishing of every component is a core value. Hand-bevelled and polished bridges, black-polished screws, Perlage, Geneva stripes and circular graining are traditional decorative techniques that reflect our conviction that every component of every timepiece deserves meticulous artisanal attention.

Limited to 25 Examples

The Zeitgeist is a bold tribute to the history of Resonance watchmaking and a celebration of our milestone achievement of stable, predictable and resilient Resonance Synchronization.


Zeitgeist
1 out of 25


20
30
40

Mirrored Force Resonance Zeitgeist ST25-RF.ZG

TECHNICAL SPECIFICATIONS

Case: Stainless steel
Sapphire crystal and case back with anti-reflective treatment
Water resistance: 3 ATM
Diameter: 43 mm
Height: 11.55 mm
Lug-to-Lug: 49.60 mm

Dial: 18K White Gold, “vernis laqué poli”, off-center

Hands: Manufactured by Armin Strom Heat blued stainless steel with hand finishing

Strap: Dark grey Alcantara strap with grey stitching Stainless steel pin buckle

Limited Edition: 25 pieces


ARMIN STROM

CALIBER ARF21_ZG

TECHNICAL SPECIFICATIONS

Movement: Armin Strom Manufacture Caliber ARF21_ZG

Indications: Hours, minutes, twin-seconds

Winding mechanism: Manual winding

Functions: Resonance, Flyback

Bridge/Main plate: Rose gold coloured PVD coated

Regulating system: Two independent regulating systems connected by a resonance clutch

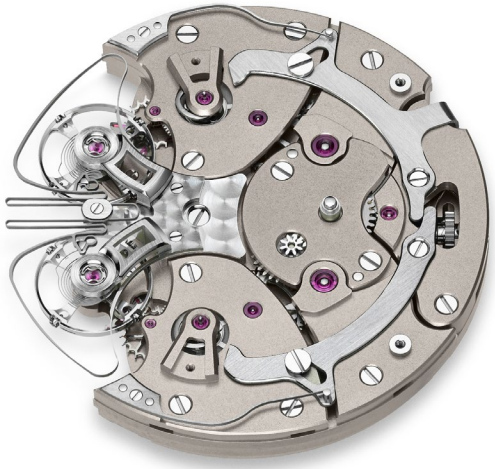
Power reserve: 80 hours

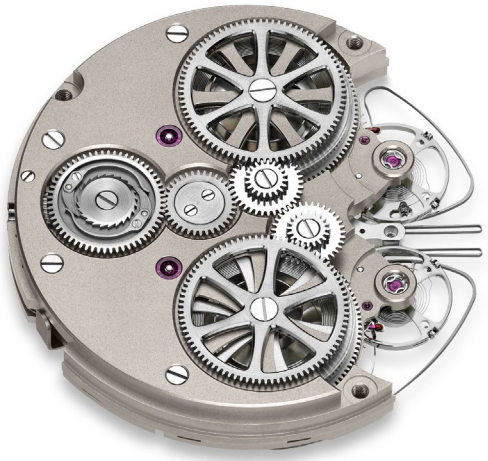
Frequency: 3.5 Hz (25,200 vibrations per hour)

Dimensions: 37.20 mm x 6.70 mm

Jewels: 39

Number of components: 260





ARMIN STROM AG
Bözingenstrasse 46
CH-2502 Biel/Bienne
Switzerland

Phone +41 (0) 32 343 33 44
info@arminstrom.com

www.arminstrom.com

Follow us on: