



VACHERON CONSTANTIN

GENÈVE, DEPUIS 1755

Métiers d'Art Copernicus celestial spheres 2460 RT

- A collection inspired by Nicolas Copernicus and the history of the great astronomical discoveries
- Three innovative expressions of the decorative crafts
- A new Manufacture movement, 2460 RT calibre featuring an original display
- Hallmark of Geneva certified timepieces

Vacheron Constantin's master-artisans are quintessential artists endowed with the unique gift of stirring emotions. Through the creation of authentic artworks, their spirit of innovation and their exceptional skills have been perpetuated from generation to generation since 1755. This artistic mastery is fully expressed through the new *Métiers d'Art Copernicus celestial spheres 2460 RT* collection. The Manufacture has chosen the formal simplicity of a white gold case to set the scene for the astronomical world according to Nicolas Copernicus. With its original display and spectacular decoration, this new collection presented at SIHH 2017, pays tribute to one of humankind's greatest discoveries: heliocentrism.

The Copernican revolution

Nicolas Copernicus was a mathematician and philosopher, who in 1543 published *De revolutionibus orbium coelestium*, a work heralding a major astronomical revolution in the history of science. His hypothesis challenged geocentrism, the cosmological system rooted in antiquity and defended by Aristotle and Ptolemy, which held that the Earth is immobile and located at the centre of the universe. In this book, Copernicus put forward the theory of heliocentrism, demonstrating not only that the Earth spins on its axis and has a satellite, the Moon, but above all that it gravitates around the Sun. Several decades later, this theory was to be completed by incorporating the elliptical trajectories of the heavenly bodies. This new vision of space had a considerable philosophical impact on the perception of humanity. It overturned all existing beliefs and ushered humankind from a closed world into an infinite universe. This revolution was to have profound repercussions on all fields of thought. Vacheron Constantin pays homage to these emblematic discoveries that definitively changed the face of the world.

One dial, three different executions

The *Métiers d'Art Copernicus celestial spheres 2460 RT* collection testifies more eloquently than ever to the creativity of the Vacheron Constantin master-artisans. They have dreamed up three dials with different interpretations of the same theme. The decoration is inspired by the graphic depictions of Andreas Cellarius, a 17th century Dutch-German cartographer, author of the most important colourful sky map, *Harmonia Macrocosmica*, with its splendidly baroque style.



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The dials of the collection comprise two distinct parts. The oval centre bears a Sun with a glowing hand-engraved pink gold face, while the outer disc is dedicated to three decorative craft variations. Between the two, a tiny elliptical groove provides space to display orbit performed by the Earth. The latter is represented by a tiny gold disc, slightly domed and measuring barely 6.8 mm diameter, featuring a polar view of the continents based on a Lambert conic map projection.

The art of Grand Feu enamel

The first model in this trio gives pride of place to various enamelling techniques. The enameller has drawn inspiration from the astronomical map of the Copernican system as drawn by Andreas Cellarius. The champlévé Grand Feu enamel Earth reveals the blue of the oceans and the geography of the continents, an authentic technical feat when portrayed on such a scale. In the background, a map of the sky on a gold base is enamelled in pastel colours. It is punctuated by fine lines illustrating the orbit of the five planets shown. Each of these heavenly bodies, represented by a star, is mentioned by its Latin name, as are the two solstices. The outer part of the dial bears the 12 zodiac signs in polychrome enamel. They are formed using stencils, finished with a quill pen and filled using a fine brush. This dial resulting from patient, meticulous and perilous craftsmanship required more than a month's work and numerous firings until 850°C before being smoothed with an abrasive stone, lapped and polished. The very same operations that have for centuries contributed to the excellence of the Geneva watchmaking tradition.

The art of engraving

The second dial, graced with an even more baroque-inspired aesthetic, is hand-engraved. The 12 signs of the zodiac intertwine and overlap on a white gold disc. The engraver has provided a wealth of *ramolayé* (pounced ornament) details, highlighting volumes in the material carved out by hand and lit up by the subtle interplay of slanting and depth effects. The bulging muscles of Sagittarius or the flowing mane of Capricorn are outstandingly realistic when viewed under a magnifying glass. On the Earth orbiting around a flaming gold Sun, the finesse of details has been pushed to extremes: the oceans are covered with microscope waves achieved by engraving effects, while the contrasting continents are polished to accentuate the luminosity of the gold. An expression of truly exceptional craftsmanship.

Laser engraving meets hand-engraving on sapphire crystal

The third dial is adorned with decorative techniques involving several novel aspects. To accompany this dance of Earth and Sun, the zodiac signs are complemented by a 3D-effect star-studded sky. The Earth is hand-engraved and picks up this contrast between the fine graining of the ocean waves and the brilliant glow of the continents. A hand-painted midnight blue underdial is overlaid with a transparent sapphire crystal engraved on its back. Vacheron Constantin has used the innovative laser technique to sculpt the symbols. The engraver then works them over entirely by hand so as to accentuate the raised motifs and play with the opalescent effects of sapphire. On the front, the constellations are laser-engraved and then highlighted with Super-Luminova®. The captivating sight of the sky chart echoing the immensity of the night sky is thus fully revealed in the semi-darkness.

An original display embodying a technical feat

These Hallmark of Geneva certified timepieces driven by a mechanical self-winding Manufacture-made movement, calibre 2460 RT. Entirely designed, developed and created by Vacheron Constantin in a three-year process, it provides the possibility of staging the fascinating view of the sky reproducing the heliocentric system. The time is displayed by two triangular peripheral hands in 4N gold – a cut-out one for the hours and a solid one for the minutes – that

glide around the dial rim. These pointers are driven by large dedicated wheels positioned on the outer part of the calibre.

The elliptical path of the Earth around the Sun is a key highlight of this watch, exuding a powerful presence and providing continuous information as the days go by. The first complication takes the form of the Earth that spins on its axis in a 24-hour rotation period, corresponding to a mean solar day. The second complication achieved by means of a 'tropical' gear train is the Earth's elliptical orbit around the Sun in 365.2421898 days, meaning one tropical year. An extremely precise mechanism, since the device operating this realistic motion of the Earth requires a one-day correction only once in 8,000 years – an eternity! This degree of precision for such a complication is a means by which the Maison testifies to its commitment to developing new movements. A tour de force serving as a timely reminder that the Manufacture has consistently demonstrated this capacity for innovation in terms of analogue time display, guided by its mastery of horological engineering as well as its creative boldness cultivated across more than 260 years.

Well-mastered details

The gold oscillating weight appearing on the back of the watch and protected by a sapphire crystal features an engraving on the same theme: a radiant Sun surrounded by ellipses. This 352-part self-winding calibre has a 36-hour power reserve. The perfectly mastered finishing operations are entirely crafted by hand in accordance with traditional watchmaking methods.

Twelve stylised zodiac signs are engraved around the rim of the 43 mm-diameter bezel. To ensure optimal convenience, all functions – the hours, the minutes, as well as the two motions performed by the Earth – are adjusted via the crown. The three models are fitted with a *Mississippiensis* alligator leather strap secured by a gold buckle. They are delivered in a precious presentation wood box containing a magnifying glass providing a chance to admire in detail the finesse of the artistic work accomplished on these creations.

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<http://sihh.vacheron-constantin.com>

TECHNICAL DATA

Métiers d'Art Copernicus celestial spheres 2460 RT

References

7600U/000G-B212 (Grand Feu enamel)
7600U/000G-B211 (Hand-engraving)
7600U/000G-B226 (Sapphire)
Hallmark of Geneva certified timepieces
Only available in Vacheron Constantin Boutiques

Calibre

2460 RT
Developed and manufactured by Vacheron Constantin
Mechanical, self-winding
37 mm (1 1/4") diameter
6.7 mm thick
Approximately 36 hours of power reserve
4 Hz (28,800 vibrations/hour)
352 components
27 jewels

Indications

Hours and minutes indication by peripheral hands
Earth orbit around the Sun and Earth rotation on itself

Case

18K white gold
43 mm diameter, 12.9 mm thick
Transparent sapphire crystal caseback

Dial

18K 5N gold stamped sun
B212: 22K gold, Grand Feu enamel, champlévé Grand Feu enamel Earth
B211: 18K gold, hand-engraved dial and Earth
B226: 18K gold, hand-painted dial (sky); laser engraving & hand-engraving on sapphire crystal (zodiac signs); laser engraving & Super-Luminova® (constellations); hand-engraved Earth

Strap

Black *Mississippiensis* alligator leather with alligator leather inner shell, hand-stitched, saddle-finish, large square scales

Buckle

18K white gold buckle
Polished half Maltese cross-shaped

Presentation box

Luxury model

Accessory

Delivered with a magnifying glass