

Stichting Haegsche Tijd



Media release

"INNOVATION IN MOVEMENT" AN EXHIBITION AT THE HEART OF THE WATCH

The Musée international d'horlogerie (MIH) dedicates its new temporary exhibition to the beating heart of the mechanical watch. 2025 marks the 350th anniversary of the publication of Christiaan Huygens' design for the regulating balance-spring. In 1675, this Dutch scientist transformed the course of watchmaking history by revealing to the world a spiral spring capable of reconciling precision and transportability in timepieces. The exhibition Innovation in movement, presented by the MIH and the Dutch foundation Stichting Haegsche Tijd, explores the origins, developments, and various applications of this invention. It highlights how the balance-spring laid the foundations of modern watchmaking and became a strategic component of the watch industry. The exhibition is held under the patronage of the Embassy of Switzerland in the Netherlands, the Embassy of the Kingdom of the Netherlands in Switzerland, and the Republic and Canton of Neuchâtel.



The public opening, accompanied by period Dutch music performed by the ensemble La Sfera Armoniosa, will take place on Thursday, February 20, at 5:30 PM at the MIH. The exhibition will be held from 21 February - 22 June 2025 at the MIH. Open Tue - Sun, 10 am - 5 pm.

The Grand History of Watchmaking Through the Prism of Its Finest Component

The exhibition offers a historical overview of innovations related to the balance-spring from the 17th century to the present day, structured into four sections. The first section addresses the historical, geopolitical, and scientific context of 17th-century Europe, focusing on the Netherlands and France, where Huygens conducted his major research. Within this general climate of scientific emulation and the more intimate setting of the Huygens family in The Hague—recreated in augmented reality—the conditions crystallized for the invention of the balance-spring as the ultimate oscillator in mechanical watchmaking. The second section presents the transition from the pendulum to the balance-spring, emphasizing the economic and geopolitical stakes of technical innovation. The ambitions of states in mastering navigation fueled the race for transportability and precision in timepieces. The third section

examines the technical properties of the balance-spring, its composition, geometry, and limitations in relation to temperature variations and magnetism. These challenges were the subject of research and development throughout the 19th and 20th centuries, concerning not only the shape and material but also the skills of artisans and workers involved in the manufacturing and adjustment of balance-springs. The final section questions the innovation process characterizing the 21st century, distinguishing two approaches. The first seeks to enhance the balance-spring's performance using new materials such as silicon. The second reconsiders the path taken by watchmaking 350 years ago by exploring alternative oscillators based on different principles. Will these developments bring an end to the centuries-old dominance of the balance-spring? *Innovation in movement* is a didactic and chronological exhibition that allows the general public to familiarize themselves with this seemingly simple component—a coiled metal wire—which continues to surprise.

A Landmark Exhibition with Contributions from Twenty Lenders

Alongside the extensive MIH collections, around twenty private and institutional lenders contribute to the exhibition's unique content, making it a flagship event in the 2025 horological calendar. The exhibition shows an exceptionally rich watchmaking heritage, bringing together rare objects, industrial tools, and unpublished archives illustrating the evolution of this key invention. Major historical pieces are presented, often for the first time in Switzerland, such as one of the six oldest known table clocks by The Hague clockmaker Salomon Coster (1657) or Isaac Thuret's balance-spring clock (shortly after 1675), loaned by The Planetarium Zuylenburgh Collection. From the "Journal des Sçavans" featuring the first published drawing of Huygens' balance-spring in 1675 to 21st-century silicon experiments and Charles-Édouard Guillaume's Nobel Prize-winning temperature-invariant alloys, the exhibition explores successive innovations that have refined the balance-spring. Beyond these historical milestones, the exhibition also reveals the industrial and human realities accompanying the production of the balance-spring. A section is dedicated to the tools that enabled its industrialization. Photographs and archives document the crucial role of women in this production chain, particularly the "régleuses", true experts in shaping and adjusting the balance-spring at their spiral counting stations. This expertise, illustrated by excerpts from Cyril Schäublin's film "Unrueh/Unrest", highlights the importance of manual labor in an industry undergoing mechanization at the turn of the 20th century. Finally, the exhibition looks to the future by presenting new technological alternatives challenging the balancespring's dominance, particularly silicon monolithic oscillators produced using highly advanced manufacturing processes. By bringing together these rare objects and industrial testimonies, Innovation in movement offers a fresh perspective on three and a half centuries of technical evolution. The exhibited pieces will allow the public to understand the historical origins of the balance-spring, its physical properties, its contemporary industrial developments through numerous demonstration models and prototypes, as well as through films and historical reconstructions.

A Fruitful International Collaboration

The Stichting Haegsche Tijd was founded in 2018 with the goal of creating a time museum in The Hague, dedicated to time-measuring devices as well as its physical, biological, and philosophical dimensions. The foundation's core activities include organizing conferences, exhibitions, and excursions. Currently, it focuses on Christiaan Huygens, the most important Dutch scientist. It was in this context that Stichting Haegsche Tijd approached the MIH to develop a temporary exhibition that, beyond its presentation in Switzerland, could potentially travel to the Netherlands and abroad. Highlighting the historical ties between Switzerland and the Netherlands in the field of innovation, the exhibition is held under the joint patronage of the Embassy of Switzerland in the Netherlands and the Embassy of the Kingdom of the Netherlands in Switzerland.

Pictures and documents <u>https://drive.google.com/drive/folders/1AyHxvS2DOR87Rvx2mtOTc0me79B6bIdO?usp=sharing</u>

For further information www.mih.ch

www.haegschetijd.nl

La Chaux-de-Fonds, 18th February 2025