

ONEOF®

The start-up making waves in Swiss watchmaking.



Origin

measurement.

From the basement of a country house, after days, endless nights and long weekends of non-stop work, two founders managed in only a few years to create products that can equip production lines and the exclusive stores of world leaders in their sector. We are not located in California but in the simple Vaud countryside, in the heart of Swiss watchmaking. This is the story of **H2i** (Horology - Innovation - Instrumentation) and its brand of products **ONEOF**, dedicated to the next generation of chronometric

The creation of this «young start-up» was born from the meeting, at the end of 2000, of two experts: Jean-Charles Rousset and Emmanuel Baudet. Jean-Charles Rousset was at that time responsible for innovation projects for TAG Heuer under the direction of Jean-Christophe Babin The unbridled dynamism and limitless imagination of this «dream team» (as the previous CEO, now director of Bulgari liked to call them), enabled them to present outstanding innovations every year. Jean-Charles has filed numerous patents and is known in particular as Co-inventor of the TAG Heuer Carrera Mikrogirder concept, which was awarded the Aiguille d'Or, the highest distinction of the Geneva Grand Prix d'Horlogerie in 2012.

For these highly «exotic» projects, he called on Emmanuel Baudet, then a research engineer at the École Polytechnique Fédérale de Lausanne (EPFL). The engineering requirements went beyond simple watchmaking and it therefore, became necessary to consult knowledgeable experts such as Emmanuel, particularly in the field of instrumentation and magnetism. Together, they co-invented the Pendulum concept and developed a high-frequency magnetic oscillator that they proceeded to integrate into a double tourbillon, the TAG Heuer Carrera MikroPendulumS.

Emmanuel and Jean-Charles challenged the greatest watchmaking principles, rethought product design with modern engineering techniques and created measuring tools enabling them to control the chronometric accuracy of their developments. The conclusion is obvious: in watchmaking, to innovate, it is necessary to be able to measure.

This observation became the starting point of their entrepreneurial adventure in 2014, in the basement of the old farmhouse in the Vaud county. The raison d'être of their company is simple: to innovate and offer new generation chronometric measurement solutions to watch manufacturers, but also to individuals and retailers, hitherto forgotten, via the ONEOF brand.

The range of products has been well thought out and organized to meet the precise needs of different objectives with specific features for each of them. The most obvious seems to be finding the right solution for the problem of magnetism.



TAGHeuer Carrera MikroGirder Chronograph with linear oscillator 1000Hz



TAGHeuer Carrera MikroPendulum Chronograph with linear oscillator 50Hz

Magnetism, the bane of modern watchmaking.

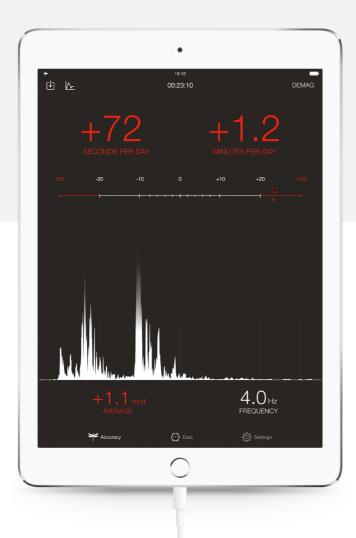


Magnetic fields, omnipresent in everyday objects are a real nuisance for almost all watch brands. Only a few of them have the technical and financial capacity to master this problem, particularly through the use of new materials for the oscillator, such as silicon.

Without corrective action, the loss of accuracy of a «magnetized» watch is immediate, irreversible and can reach up to several minutes per day. Strangely, although there are different tools, none of them are used in the store to solve this problem. Bulky, too technical, not very functional, expensive, they do not offer suitable solutions and the watch is systematically sent back to the local After-Sales Service platform or the Manufacture, often meaning weeks or even months of waiting for the customer. Moreover, the phenomenon of magnetization is totally independent of the care or age of the watch and can occur at any time and on a recurring basis. It is therefore vital to be able to deal with this problem in a simple and quick way, directly in the shop and to make the customer aware of the disturbances caused by magnetic fields.

Measures & demagnetises directly in the shop.







ONEOF Accuracy *boutique edition* is the only integrated tool capable of checking the accuracy of a mechanical watch and demagnetising it if necessary. Simply connected to a smartphone or tablet, it can correct the magnetization problem in less than 2 minutes. Fluid and intuitive, the application developed by H2i requires no special technical knowledge and can be used directly by store staff. Realized with the customer, the service offered inevitably promotes client satisfaction and commitment to the brand.

By avoiding many returns to after-sales service, the ONEOF Accuracy boutique edition considerably improves the customer experience that all watch brands are now seeking to develop.

The sensor is equipped with a piezoelectric microphone that is highly sensitive to the vibrations of the regulating organ, the «tick-tock» of the watch. The algorithms of the application process the acoustic signal in real-time and extract various information, including chronometric accuracy. The correct «rate» of a watch differs according to the brands and their criteria, but is generally within a maximum range of -15 to +15 seconds per day.

If the latter is not acceptable, a simple touch on the function DEMAG of the application will generate a brief but powerful electromagnetic impulse that demagnetizes the spiral spring of the watch and instantly restores its accuracy.



Entirely invented and developed by H2i, the electronic circuit that manages demagnetization is unique and stands out from existing products through its ingenuity. It is powered only via a USB cable which is directly connected to a smartphone or tablet and thus ensures excellent mobility for the product, especially when the diagnosis is made with the customer in the shop.

The application is an extremely important part of the product because it gives it its interactivity, functionality and fluidity. It automatically detects the presence of a watch placed on the sensor, calculates and displays its accuracy, manages the demagnetization process and integrates a database for saving and sharing results. H2i has always distinguished itself by the particular care taken in the design of its products, the choice of materials and their finishes.

The ONEOF Accuracy boutique edition is no exception to the rule: touch, ease of use, compactness are all essential elements that have been carefully thought out and worked on.

ONEOF® completes its range for enthusiasts and watchmakers.



As watchmaking enthusiasts, the founders have not forgotten the fans of mechanical watches. The **ONEOF Accuracy**² product is the smallest chronometric measurement tool on the market. Ultra-compact, it slips into your pocket and allows you to get a preventive diagnosis of your watch directly on your phone in just a few seconds. It will give enlightened enthusiasts a precise overview of how their mechanical watches work and offer a unique first experience with the brand and its universe.

Enthusiasts, in-store sales advisors and now, watchmaking laboratories.

Watch manufacturers were the first to equip by the hundreds their points of sale with ONEOF Accuracy boutique edition. Very quickly, they announced their needs for a new solution, equipped with all the features that have made ONEOF products so successful and aimed, this time, at professional watchmakers. The two founders took up the challenge and presented the ONEOF Accuracy Pro: a new generation of multi-position chronometric measuring devices.



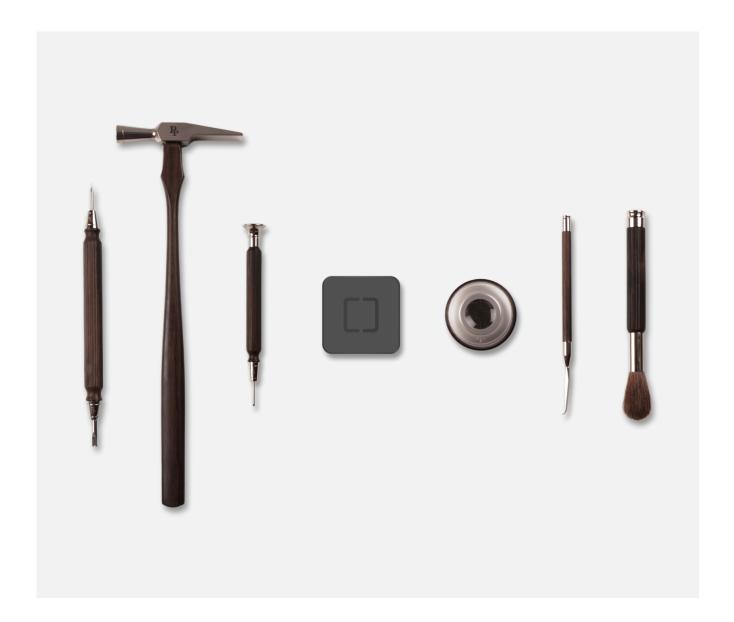
accuracy pro

ONEOF Accuracy Pro is equipped with an impeccable quality of finish and durability. Made entirely of black anodised aluminium, all parts that may come into contact with the watch are protected by a «soft-touch» coating.

The measurements are made in all positions, without any mechanical play. An accelerometer integrated into the measurement electronics allows the position information to be sent back to the application. The all-new Windows app perfectly meets the current needs of the watch industry.

It provides all the technical information useful to watchmakers: calculation of the rate, the amplitude, the beat error, display of the acoustic signature of the escapement, the diagram, the cumulative graphs, the dispersion and a unique and unprecedented display mode for multi-position measurement results: the radar chart. Primordial nowadays for all industries, special attention has been paid to the centralization and management of results and measurement parameters in dedicated databases.

H2i, Petitpierre and the Acrotec Group. Made in Switzerland.



2017 sees the watch industry's demand for ONEOF products growing very strongly. Petitpierre SA, a specialist renowned for its premium watchmaking tools and micro-component assembly machines, calls on the expertise of H2i on behalf of a major watch brand in the Vallée de Joux. The success of the collaboration was such that Petitpierre acquired the young and expanding company a few months later. These two companies are now part of the Acrotec group, the leading supplier of mechanical watch components in Switzerland.

The success of H2i and Petitpierre lies in a common desire to offer products that are technically impeccable and provide a great user-friendly experience: product design, fluid interfaces, and optimization of every detail. The launch of ONEOF Accuracy Pro is a perfect example of a successful partnership. The two companies fully integrate the design, development, production and assembly processes locally in Cortaillod (Neuchâtel, Switzerland), making ONEOF a range of products very much Swiss Made.