



## **HYT / Mission HASTROID**

### **A new concept of space-time ready for take-off**

*"A long, long time ago, in a far, faraway galaxy... people were able to imagine, create and shape objects that could represent the measure of the passage of time. These people were called watchmakers. Having reached the quintessence of their art, and at the intersection of ground-breaking technology, they created meca-fluidic timepieces, known throughout the galaxy as HYT Watches. Launched in January 2022, Hastroid was the forerunner to the new fleet of HYT watches, on their way to explore new dimensions..."*

Intergalactic travellers may perhaps come across this tract in a few thousand years' time and the message it will send out to lovers of the ancient art of watchmaking, which has developed uninterruptedly since the Middle Ages.

Beyond appearances, the HYT Hastroid watch was not born within the confine of the real or known worlds. Its origins lie on Planet Earth. In the heart of the mountains of Switzerland, it was imagined, conceived and developed in line with professional standards.

As an art as traditional as it is ground-breaking, from the earliest times, instruments for measuring time have been the product of human genius, supported by science and formal creativity and design. The fluidic time indicator is inspired by the clepsydra, a primitive type of clock from Ancient Egypt, whose innovative principle was to allow water to flow from one jar to another to measure the passage and "flow" of time.

### **HYT Hastroid: a new watch custom-made for the future**

Symbol of a new launch, the Hastroid has been designed and conceived to meet new expectations. Its 48 mm diameter casing, with a total length of 52.3 mm and a 13.3 mm case thickness is shaped from the most modern or contemporary high-quality materials: titanium, titanium and carbon or an innovative alloy of stabilized bronze and carbon, a contact point between ancient times and the aspirations of the future.

Custom-made for new adventures, the multi-layer middle case presents subtle openwork, while the sandwiched construction method of the watch overall, waterproof up to 50 metres, with a central protective titanium case for movement, allows optimal handling of the missions assigned to this new spacecraft.

Like a flight deck, the watch is topped by domed sapphire crystal offering a largely unobstructed view of the overall dial. The centrepiece of the meca-fluidic mechanism remains, of course, the fluid system, with two central "bellow" reservoirs, whose design, unique to HYT creations, reinforces the character and feeling of power and the capillary surrounding the dial.

### **Retrograde hours and large minute hand**

The coloured fluid it contains performs the function of indicating the retrograde hours. The components of the manual winding mechanical movement reveal themselves subtly through openwork workmanship at the back of the dial or plate.

This calibre was designed by Eric Coudray, a well-known master in the field. Under his guidance, and with the assistance of the watchmaker Paul Clementy, Prix Gaïa award winner, and Arnaud Faivre, at the head of the Tec Group, the movement has developed a finer aesthetic and finish, with elegant satin finish or laser-treated or bead-blasted parts.

Detailed work went into improving the readability of the dial and thus it has a large central pointed hand for the immediate reading of the minutes, whereas the two subdials, arranged as instruments on a dashboard, provide essential additional information: on the one hand, a small second movement, and on the other, the power reserve.

This same concern for clarity and readability led to special work on the luminescence to make the Hastroid bright even in the deepest darkest depths of outer space. Such technical elements purely reinforce the allure of this pioneering watch.

### **Four products, only 27 of each produced**

Original and rare, there are four versions of the new Hastroid, of which only 27 copies of each will be produced.

For the launch of the Hastroid, HYT has developed special colour ranges with new shades, particularly an iconic green for the contemporary watchmaking brand.

For this model, baptised "Green Nebula", the green tone of the time indications and the fluid, accentuated by the rubber and embossed Alcantara bracelet, contrasts with the black carbon and titanium case.

The Hastroid does not only carry the entire heritage of HYT watches, but also all the will to conquer and win of this unconventional watchmaking company.

*"We are engaged in a process of brilliant craftsmanship that flawlessly integrates fluidic technology and mechanical complexities", states Davide Cerrato, the new CEO and Creative Director of HYT.*

## **Davide Cerrato, a visionary designer takes the controls**

Often introduced as a "master of neo-vintage watchmaking", Davide Cerrato has produced numerous outstanding creations for well-known first-class watchmaking companies. However, Davide Cerrato is anything but nostalgic, and he who is known as the "master of vintage" among the watchmaking elite has decided to demonstrate that he can also be a designer with an eye on the future.

By joining HYT to guide not only style but also strategy, through his double role as CEO and creative director, at the company recently acquired by KTS (Kairos Technology Switzerland SA), Davide Cerrato is particularly excited to be able to express his creative inspirations freely. They draw their power from multiple transgenerational references, taking in the most daring or fun aspects of pop culture, such as the epic of space exploration or modern symbols of science fiction.

At a time when the dream of discovering the universe is once again finding its magic and strength, at the very time in which the desire to travel to space is becoming a tangible and concrete reality, the HYT Hastroid is an ode to the dream of interstellar travel.

Today, HYT is ready for take-off and preparing to go into hyperspace mode. Are you in?

## **HYT, the UFO of luxury watchmaking**

Returning to the very sources of the concept of the clepsydra and the passage of time, HYT's designers wanted to apply a contemporary vision to it. It took more than ten years to develop fully the patented meca-fluidic technology owned by the Neuchâtel brand, established in 2012.

That same year, the Grand Prix d'Horlogerie de Genève (Geneva Watchmaking Grand Prix) innovation prize rewarded the brand's inventiveness.

Sometimes described as the UFO watchmaker, HYT watches, with their style and enhancements, have brought a breath of fresh air to luxury watchmaking. First spacecraft of the new HYT fleet, the Hastroid heralds a new era and explores broader horizons, without limitations or boundaries and, as always, with this same pioneering spirit driving it. No technical or stylistic limitations hold it back: the Hastroid is a watch for the future.

## **HYT's meca-fluidic technology**

*"Meca-fluidic technology is a new term in science and research, harnessed for use in luxury watchmaking. We have the ability to highlight the symbiotic nature of these two - mechanical and fluidic - technologies"* says Davide Cerrato, HYT CEO and creative director.

What does this meca-fluidic technology rely on?

There is no need to sit down with a "Textbook on Meca-fluidic Watchmaking" to understand the concept, especially as such a volume does not yet exist. Since the beginning of the new millennium, HYT has been writing a new page of it every day, particularly through its discoveries and the observations of its engineers and watchmakers. Because, while each HYT product is at the cutting edge of technology, each one is above all an item of mechanical luxury watchmaking dedicated to the pleasure of knowledgeable connoisseurs.

Thus, the new Hastroid model is driven by a manual winding mechanical movement (41 rubies) at a frequency of 28,800 vibrations per hour (4 Hertz) and with 72 hours' power reserve.

This mechanical beating heart gives its power and strength to the precise functioning of the watch. This precision is clear in the reading of the time settings. All the originality of HYT watches lies in the specific nature of this time indication: no classic hands, but instead the observation of the movement of the two fluids.

The perfect circulation of the fluids in microcapsules or "capillary tubes", at the boundary between the micromechanical and chemical realms, gives HYT its uniqueness and originality: the first and only meca-fluidic watch.

### **A quarter of a human hair, but 10,000 times more airtight than a classic watch.**

How does it work? Observing the watch dial offers some insight. Two flexible reservoirs (called "bellows") are attached to each end of a capillary. The thickness of the walls of this reservoir is of an extraordinary fineness of hardly a quarter of a human hair. The active, coloured fluid is in the first reservoir; the passive fluid is in the other reservoir. It is transparent.

The working principle relies on a mechanism that drives the two bellows. To keep the fluids separate, while controlling their progress through the bellows, HYT's engineers have tamed the physical phenomenon based on the repulsive force of the molecules in each fluid. Immiscible fluids, meaning that they never mix, and which are in permanent interaction, are at the heart of the watch.

To ensure the whole watch works with optimal reliability, the fluidic module must be perfectly airtight. In practice, its airtightness is 10,000 times greater than that of a diver's watch. This is also the reason why the fluidic modules are permanently sealed.

A question that definitely arises for hi-tech fans is how do you offset the fluid expansion due to variations in temperature?

This is an important question about a valuable item, such as a wristwatch is - which is thus subject to body temperature - and naturally exposed to the changes and uncertainties of everyday life, both indoors and out. The key component is the thermal compensator inside one of the two bellows.

## **A trusted and optimised luxury watchmaking calibre**

The other serious issue is clearly the synchronisation between the functioning of mechanical watchmaking and the movement of the fluids.

The movement of the new Hastroid is the 501 CM calibre designed by Eric Coudray.

Among the most remarkable aspects of this exceptional watch calibre is its ability to provide constant displacement and distribute enough energy so that the liquids flow at the desired speed inside the glass capillary. An increase by a minute of the liquid inside the glass tube is equivalent to a movement of 1.5 micron of the bellow. The choice of a manual winding movement is not insignificant: it ensures regular and seamless operation.

To allow a link between the fluidic system and the watch calibre, the movement has an oversized lever, called the "sensor", which serves as a bridge as it allows a link to be made between the functioning of the cam, which transforms a circular movement into a straight-line movement, and that of the bellow, whose role is to regulate the movement of the two liquids. This cam, an innovation introduced by Eric Couderay, allows a perfect synchronisation between the fluid time and the mechanical time.

In practice, once the lever is activated, the movement drives against a bellow allowing the uninterrupted flow of fluids for twelve hours. When it reaches 6 o'clock, the two liquids return to their initial position. At 6 o'clock, the fluidic module disconnects from the mechanical part and performs a self-regulated retrograde movement to find its initial position. Once reconnected to the mechanical part, it starts again for a 12-hour cycle.

These technical features, complex at first, are in fact a real eye-catcher as the watch dial is constantly in action.

The sharp eyes of experts, collectors and lovers of luxury watchmaking will also rest on the finish of the calibre and the new casing of the overall piece. HYT's team have paid very special attention to this. The outcome is obvious and clearly shows that the Hastroid has some of the best standards of contemporary luxury watchmaking with exacting requirements of the workmanship of components. Such a quest for perfection, supported by the masterful expertise of traditional Swiss watchmakers, is combined by HYT with creative boldness, as demonstrated by the exclusive black finish.

Everything has been thought of carefully and in symbiosis: the finish of the watch calibre and the technological and modular casing. Overall, the entire quality chain process in watch production has been rethought and refined with the development of these new timepieces, relying on over a decade of practical experience. The perfect efficiency of the 501 CM calibre has also been tested to ensure its reliability.

Additional proof that the knowledge of this outstanding technology, as well as the exceptional unique nature of the ultra-efficient contemporary materials used, are also elements that boost the captivating and sensual allure of these watches, designed to stimulate the imagination.