INTRODUCING The Genus GNS1.2 TD In Damascene Titanium

A high-tech, high-craft take on the GPHG-award winning complication.

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Introducing The Genus GNS1.2 TD In Damascene Titanium

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It's a truism that you can't teach an old dog new tricks, and in horology, there aren't too many dogs older than the conventional combination of hands and numerals to tell the time. Novel time-telling displays are rare there are things like the wandering hours display, of course, and occasional exotica like the bras en l'air (literally, arms in the air) watches in which an animated figure sitting in the middle of the dial points to the hours with one hand and the minutes with the other; there are the various variations on the theme of a digital display. However, Genus, which got its start just last year, has managed to do so, and the founders, Sébastien Billières and Catherine Henry, would go on to see their creation awarded the Mechanical Exception prize at the 2019 GPHG. The core of the Genus time-telling system is the snake-like arrangement of what Genus calls its "genera." These are diamond-shaped elements which orbit two sub-dials once per hour, and which indicate how many tens of minutes past the hour it is. The hour can be read off the pointer to the left, which indicates the hour via a rotating carrier which makes one full revolution every 12 hours; the number of minutes which have passed in each ten-minute interval is shown on a disk at the right, which rotates once every ten minutes.



Genus has made excellent use of the decorative potential of Super-LumiNova in its watches (we seem to be seeing more and more of this in the last few years as it becomes increasingly apparent that the material has excellent long-term physical stability), and the lights-out show the watch puts on is most engrossing, and illustrates the rather hypnotic motion of the genera as they orbit around the sub-dials. GENUS - Collection GNS1 - Model GNS1.2WG #4 GPHG 2019

This latest version of the watch uses the same movement as the first, which is the caliber 160W-1.2. This is a fairly large movement – in the pocket watch range at 38mm x 7.7mm, but of course, the time-telling system is not one that would benefit from any attempt to fit it into a smaller case, and the case for the GNS1.2 TD is 43mm x 13.3mm. It's the case that is actually the news this time – while previous versions have been in precious metals, the GNS1.2 TD is in damascene titanium (the TD stands for *Titane Damassé*).



The GNS 1.2 TD can be ordered with three variations on the "genera;" shown here is the gemset version.

The term "damascene" sounds like it ought to have its origins in so-called Damascus steel, or wootz steel, in which different layers of the steel have different crystalline structures, which produces a visually striking banded effect (similarly, the *hamon*, or temper line, of Japanese swords is the result of controlling the rate at which different layers of steel cool when the sword is tempered). However, damascening is slightly different in that it involves welding together different layers of either similar alloys, or different metals all together; the term is actually <u>derived from damask silk</u> (although "damask" in turn does come from Damascus, which was a

major trading point for the material along the Silk Road). In Japan, the technique is called *mokume-gane* (independent watchmaker Kees Englebarts makes *mokume-gane* dialed watches in very small numbers, very much in the traditional fashion), and it was originally developed in 17th century Japan by metalsmith Denbei Shoami, as a way of creating decorative fittings for swords (including *tsuba*, or sword-guards). For the GNS1.2 TD, Genus' case-maker welds together different titanium alloys, which turn blue at varying temperatures.







There are various ways you can get the layers of metal to bond in this sort of work. The most traditional method, and the one that Genus seems to be using based on the press material, is so-called liquid phase bonding, in which the material is heated to a high enough level to partly liquify the boundary layers, welding them together. You can solder layers together, but this tends to introduce impurities and air bubbles, and you can also pressure-weld the layers together. Liquid phase bonding with titanium would be a delicate procedure; normally titanium is welded in an inert gas atmosphere to avoid contamination with atmospheric gasses, and to bond the layers for the Genus GNS1.2 TD case together, the final

block has been created, it's subjected to a final heat treatment that determines the depth of bluing (Genus says that clients can, if they wish, be present for this stage and determine the specific degree of saturation they want in the final product).



The final result, showing the banded effect produced by the different titanium alloys.

The effect is quite dramatic; the layered alloys produce a very vivid cornflower blue, alternating with a lighter, almost powder-blue coloration. I have seen heat-blued titanium used elsewhere in watchmaking, but I don't recall ever seeing a damascene titanium case before (one calls something a first in watchmaking at one's peril, but it's a new one on me).



Genus also offers three options in terms of the appearance of the genera. They can be had either jeweled (see above), or you can have them in either a vertical or inclined orientation.



Genus has been a favorite independent brand of mine since they launched in 2019; I think it takes a lot of guts to create something like this under any circumstances in watchmaking and, while no one could have foreseen the headwinds we are experiencing now, in 2019, it was still a risky undertaking, to say the least. I think one of the things that appeals to me so much about their watches is that they are not the sort of watches you make without, first of all, a unique vision, and second, a tremendous amount of determination; I am sure that the founders, like any other entrepreneurs, have no objection to sales (as a friend of mine likes to say – when he first started out, his dad told him, "Now, remember son, no one ever went out of business taking a profit.") But this stuff is extremely hard to do at all, and even harder to do well. I also give Genus a lot of credit for working to ensure their customers actually receive a functioning watch. Now, you may think this ought to be a given, and you would be absolutely right to say so, but high-end superwatches and unusual complications often spend more time having frustrated owners and watchmakers puzzling over why they will not go, as they do being worn and enjoyed. I hope Genus and its founders, this rather nightmarish year notwithstanding, continue to build on their early success, and to find the audience that I think their watches so richly deserve.

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The Basics

Brand: Genus Model: GNS1.2 TD

Diameter: 43mm Thickness: 13.3mm Case Material: Damascene titanium Indexes: Separate indications for hours, ten-minute intervals, and exact minutes Lume: Super-LumiNova Water Resistance: 3 bar/30 meters Strap/Bracelet: Navy blue calfskin with rolled edges (alligator available on request) with damascene titanium pin buckle



The Movement

Movement: Caliber 160W-1.2 Functions: Hours, ten-minute intervals indicated by orbiting elements, exact minutes on minutes disk at 3:00 Diameter: 38mm Thickness: 7.7mm Power Reserve: 50 hours Winding: Manual Frequency: 18,000 vph Jewels: 26 Additional Details: Hand finished with polished bevels and flanks, mirror polished steelwork

Pricing & Availability

Price: \$154,000Availability: Available nowLimited Edition: No, however very limited annual production

For more, visit genuswatches.swiss.

Forging individual strips of titanium alloy

Heating the final block of layered titanium alloys

Final blueing of the completed block

The finished case, revealing the different layers of alloy