

REVOLUTION

[Home](#) / [Editorial](#) / [The Watch Face: Sector Dials](#)



The Watch Face: Sector Dials

TECHNICAL

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Delve into the history of dial design and the elements that make up some of the most famous watch faces of our time.

Contents [hide](#)

[1_Part 1: Sector Dials](#)

[1.1_Sector – the portion of a circle enclosed by two radii and an arc...](#)

[1.2_Read between the lines](#)

[1.3_Where do they come from?](#)

[1.4_The Pioneers](#)

[1.5_The Revival](#)

Part 1: Sector Dials

Sector – the portion of a circle enclosed by two radii and an arc...

As watch brands tread that fine line between heritage and novelty, key aspects of watch design vocabulary are rediscovered, refreshed and reinterpreted for a new audience. This may be a faithful copy of an

archive dial design to celebrate a neatly-divisible anniversary or more of a nod and a wink to what has gone before while maintaining a future-facing pose. One design element that has made a welcome return across several brands is the “sector” dial, but what is it and where does it come from?

Read between the lines

While there is no hard and fast dictionary definition, a true sector dial, in this author’s humble opinion, needs to have a number of elements.

There should be two concentric rings, one for the minutes and one for the hours. The hour and minute markers should be radial lines that join the inner and outer edges of the rings – creating the “sectors”, possibly using numerals to mark the quarter hours or five-minute positions.

While the weight of the dividing lines may vary, the classic layout has a heavy line for the hour markers and the connecting innermost circle.

The central area of the dial is usually clear, which, for the pedantic reader, means that the dial is an “annulus sector” i.e. section of a ring rather a full sector like a pizza slice. These dials are sometimes referred to as “scientific dials”, or “railroad dials”. Certainly, the clear marking and fine gradations make reading off small increments of time easier, but often scientific dials will replace the radial lines with dots or numerals, taking them away from the classic form. The railroad name applies to the track-like hour and minute rings with their concentric rails and ties, but this could apply to any watch with an outer minute track and may also be confused with precision watches made for railroad use to avoid collisions.



1940's Omega "Sector" Wristwatch. Image: Vision Vintage Watches

Where do they come from?

Everyone loves an origin story but, in this case, it is not possible to pin down the first example. In the cut-and-paste world of watch blogs there are numerous references to sector-dialled trench watches but none of them carry an illustration. True, trench watches often had a bordered minute track, but it is a stretch to call them sector dials. Early examples can be found pre-First World War on pocket watches. In May this year, Phillips sold a Patek Philippe from 1910 with a wonderful example, so they probably date back a little further than this.

To me they are an example of form complimenting, rather than following, function. The dial design sits between the competing schools of Art Deco and Bauhaus, with the concentric circles typical of Deco combined with the ascetic functionality of the German school, both producing a clarity that allows the time to be read with greater precision.

The Pioneers

Despite watches growing in popularity in the wake of the First World War, sector dials only seem to appear on pocket watches until the 1930s. Christies detailed a Tiffany dialled Patek Philippe ref. 421 with a sector-ish dial that appeared in 1924, and while it is the earliest known example of a wrist watch, it lacks the features that we would expect.



Patek Philippe ref. 421 (Image: Christie's)

The 1930s saw an explosion of sector dials from several manufactures, hardly surprising as they often shared dial makers. Longines and Omega are cited as producing archetypal examples, and this is true, but classic sector dials could also be found on Rolexes, Patek Philippes, Breguets, IWCs and many more. The style continued through the 1940s and into the 1950s where the distinctive “dart” hour markers used by many brands were often joined at their tips by an inner ring, producing a sector effect.

As watch design became more forward-looking in the 1960s, the sector fell out of favour until the last decade or so when we have seen a steady increase in these retro-inspired dials.



Longines Calatrava sector dial watch, 1938 (Image: Roy & Sacha Davidoff)

The Revival

Sector dials were put back on the map in a big way when Patek Philippe added one to the dial options on the 5296 Calatrava, launched in 2005. This is a sector dial done in the classic style with multiple concentric tracks and the bold inner ring with radiating hour markers. Three years later IWC added a sector dial to their Portuguese vintage collection. The 6 o'clock seconds sub-dial gives a very different look, but both centre and sub seconds were used widely in the 1930s.



Patek Philippe Calatrava ref. 5296



IWC Portugieser IW5445-01

More recently Laurent Ferrier gave us a pared back version of a sector dial, simplified to just the inner ring and radiating lines. While this may seem like a modern, minimalist interpretation, it is almost identical to a Rolex dial fitted to ref. 2563, produced in the 1930s and illustrated in *100 Superlative Rolex Watches* by John Goldberger. 2017 saw two further opportunities to add a great sector dial to your contemporary collection with offerings from Jaeger-LeCoultre and Habring2. Jaeger-LeCoultre gave us old-school sector in both a three hander and chronograph models while Habring2 gave us the option of central or sub-dial seconds on a simplified design.



Laurent Ferrier Galet Square Boreal



Jaeger-LeCoultre Master Control Date

The sector dial, as shown by IWC is often a stylistic shorthand for vintage, revisiting the archives for established brands and providing gravitas for new ones. The strength of the design is its utility, it makes reading the time easier, and because of that it will be forever modern.

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