



# Is the Omega Marine Chronometer the most accurate vintage watch money can buy?

Omega's Marine Chronometer was produced until 1980, by which point cheaper quartz watches had asserted their dominance over the market. But it is still a landmark achievement, as the most accurate non-thermally compensated watch ever made

**By Adrian Hailwood**

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We wear watches to know the time... don't we? Given that I, and many other collectors I know, have strapped a watch on in the morning and only later that afternoon realised the watch has been neither set nor wound, maybe it is more a piece of wrist jewellery than we realise. Having the correct time is another issue altogether. Smart watches and radio-controlled quartz have made the precise time available to all who want it, but lovers of vintage don't seem to care much, often rotating their watch back into storage long before any significant discrepancy appears. But what if you love vintage watches but also prize supreme accuracy? Step forward, the [Omega](#) Megaquartz Marine Chronometer.

The R&D frenzy that accompanied the launch of [Seiko's](#) Astron quartz watch in 1969 and the flawed Swiss Beta 21 that followed in 1970 meant that improvements in quartz movement design came thick and fast. Omega put 30 million Swiss francs into the creation of an unbeatably accurate movement and came up with an oscillator that beat 288 times faster than that at the heart of the Beta 21, a watch accurate to five seconds a month. This calibre 1500, known as the "Elephant" due to its twin-battery "ears", was accurate to less than a second a month and so qualified as a Marine Chronometer, a standard much higher than regular COSC chronometer certification for mechanical watches. Battery life was still an issue, as the watch would only run for five weeks –

unacceptable for long-term accuracy – and so further work was needed.

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By 1972, Omega had fixed the power-drain issue and released the calibre 1510, a non-chronometer rated but still supremely accurate watch as the Constellation Megaquartz. In 1974, a tweak to the movement saw the calibre number change to 1511, but, more importantly, a tweak to the marketing saw the watches submitted to Besançon Observatory for 63 days of testing, a renaming to Constellation Marine Chronometer Megaquartz and a hike in the price. Each watch was sold with a detailed chronometer certificate detailing the watch's performance during the test and the movement number engraved on a plaque affixed to the end of the watch case. The plaque and a matching screwed bezel were in 14k gold on a steel case, except for in France where the demand for visible hallmarks on all gold led to a rare steel-on-steel combination.

With such levels of accuracy, it was important not to interfere with the progression of the seconds hand. This meant that the Marine Chronometer also had an independently adjustable hour hand to allow for travel across time zones. To allow synchronisation with the atomic time signal, a small “hacking” button next to the crown allowed the second hand to be paused.

Omega's Marine Chronometer was produced until 1980, by which time the affordability and ubiquity of quartz left it looking expensive and irrelevant. It stands as an important landmark in consumer timekeeping, being the most accurate non-thermally compensated watch ever made – a title it holds to this day. (Citizen's calibre 0100, accurate to one second/year, is thermally compensated, temperature change being the greatest cause of variations in timekeeping.) Couple this with distinctive, utilitarian looks and you have the makings of an icon.

## **It stands as an important landmark in consumer timekeeping**

Unlike the non-chronometer-rated Megaquartz which came in a variety of configurations, the Marine Chronometer came in one look only, unless you count the French all-steel watches and the handful of all-18k-gold examples Omega produced as a rare, limited edition. This means that for those in the know, the Omega Marine Chronometer is instantly identifiable. Such extraordinary precision is, however, available for remarkably little cost. With a total production of around 7,000 pieces, these are not common watches, but neither are they impossible to find, but it is the ingrained snobbery against high-quality quartz that keeps the prices low. At auction you can pay as little as £1,200 for a watch on its own and as little over £3,000 for a rare “full set” with original box and papers. At a dealer you will pay more, but at least you should have the peace of mind of some kind of warranty. Beware of cheap non-runners. It could be a basic battery change, but with all vintage watches, especially vintage quartz, it's a huge gamble and the subsequent repair bill can easily make the watch uneconomic. Let someone else do the hard work while you enjoy record-breaking time keeping for a bargain price.