

Double

Take



No one has more to prove than Breguet - keeper of horology's greatest name and flagship of the mighty Swatch Group. So it is to the brand's immense credit that while the Double Tourbillon surprised everyone at Basel last year, it disappointed very few. *QP* examines a gamble that deserves to pay off.

James Gurney

Breguet's intriguing history over the last decade or so, combined with the matchless reputation of horological godfather Abraham-Louis, has left the company under a pressure to perform that is unequalled in the industry. From Dr George Daniels - probably the most authoritative voice on Breguet - to the newest collector, everyone has a view on what Breguet should do and mean as one of the great watch houses. Just think of the roles Breguet must play: flagship of the Swatch Group, legacy of Nicholas G Hayek (though he vigorously denies this), keeper of the horological flame, future business, luxury brand etc., etc. Not forgetting that these roles must be played out in an industry that is changing shape at the higher levels in ways more radical than even the Seventies saw, nor forgetting the dauntingly high standards set by industry leader Patek Philippe.

One of the more interesting changes has seen the high end of the watch market increasingly populated by marvels of micro-engineering from newly established houses - think De Bethune,

Greubel Forsey and BNB Concept. These enterprises seem to be flourishing as an alternative choice rather than competition to the more established houses such as Vacheron Constantin or Girard-Perregaux. As Breguet is obviously in the latter group, surely it would seem sensible to follow a similar sort of path to Patek Philippe, who generally eschews the multi-tourbillon, multi-axis approach and relies more on the sheer excellence of its traditional watches? At the risk of adding yet more air to the volume of opinion on Breguet, this would seem to be the most sensible approach. Satisfy the pent-up demand for excellent watches with the name 'Breguet' adding that extra cachet and watch your sales grow nice and predictably, while simultaneously appeasing the legion of Breguet 'purists'.

Naturally Breguet

So on hearing that the next big news from Breguet was to be a double-tourbillon carousel with an appropriately double-century price (£205,100 to be exact), I have to admit that a sinking feeling



(Opposite page) Breguet's Classique Grande Complication ref. 5347PT/11/9ZU, or 'Double Tourbillon' (£205,100) - soon to hit the market, less than a year after the semi-functional prototype wowed the press at Baselworld 2006. The new 16-ligne, hand-wound calibre 588 beats at 18,000 vph within a 950 platinum case. The dial plate is intricately engine-turned by hand.



came over me. In this part of the industry, each horological extreme seems merely to serve as the baseline for an even more far-fetched concept and even something as quixotic as a double tourbillon can risk being made to look commonplace by the next trick in line. Surely this is the wrong direction for Breguet?

Then I saw the watch. It was time to ditch the theories for a moment and give Breguet credit for the series of outstanding designs it has produced over the last few years. As with the Tradition and the Reine de Naples, Breguet's designers have come out with a design that is both radical and yet firmly within the tradition. The acid test is that 'Classique Grande Complication ref. 5347PT/11/9ZU' looks natural or at least a natural addition to the Breguet canon. At 44 mm in diameter, it is neither over-large nor, being hand-wound, is the watch over-high. The combination of the intricately turned dial and two tourbillon apertures works exceptionally well. The central bridge linking the two tourbillons is blued and extended on one side to form an hour hand as the whole dial revolves over a 12-hour period.

The reverse is a complete surprise in itself. Normally, you would expect to see a sapphire caseback revealing the movement's main plates and the tourbillon escapements - complete with côtes de Genève and perlage decoration as appropriate, enhanced by well-chamfered edges,

(Left) As the whole movement is mounted on a carousel that rotates twice a day, the bridge between the two tourbillons was extended to form an hour hand.

(Opposite page, bottom) Rather than revealing the full majesty of the hand-wound movement, the back of the ref. 5347PT bears a hand-engraving of the Solar System, inspired by the spinning, orbital nature of the two tourbillons.

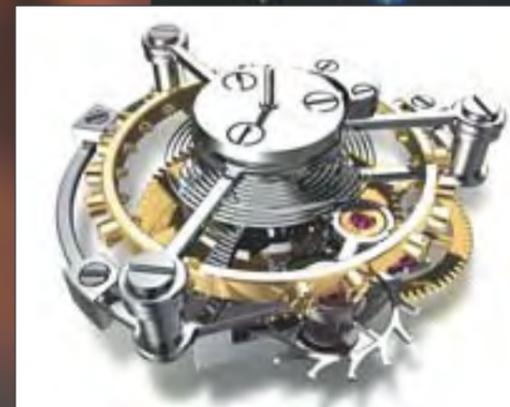
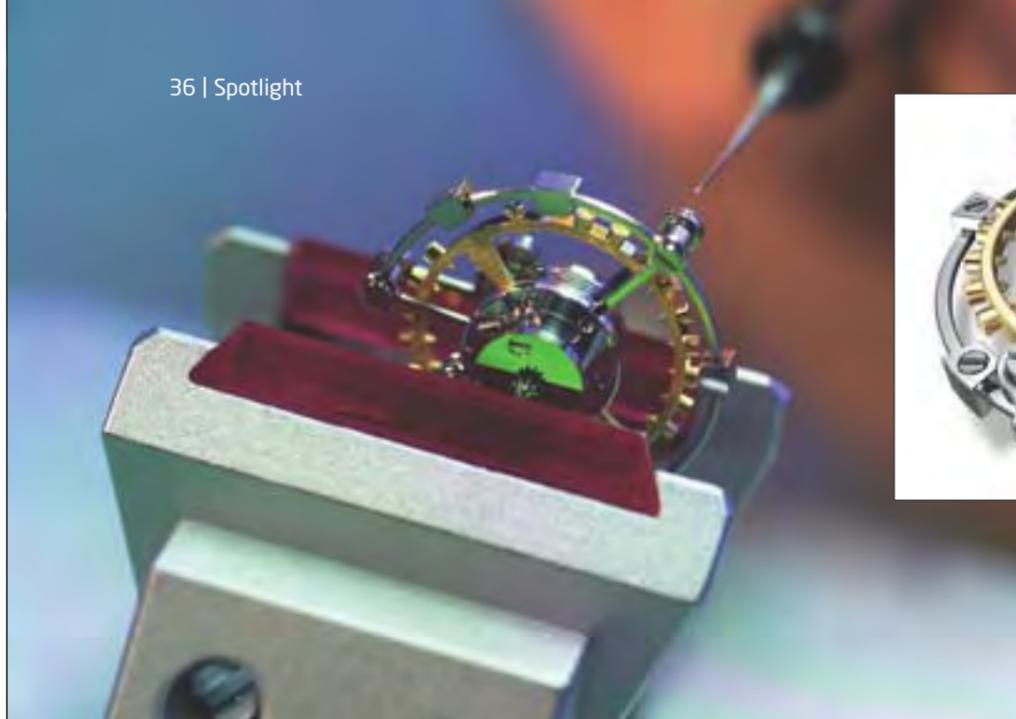


The caseback bears a highly expressive representation of the Solar System, with overtones of Aubrey Beardsley and the Hetzel-edition Jules Verne illustrations.

blued screws, false chatons and every other touch that denotes the application of highly skilled and expensive labour. Those familiar with the Tradition might alternatively have expected something along the lines of frosted plates and that spare aesthetic so characteristic of the Master himself. Instead, it seems it is time for something completely different.

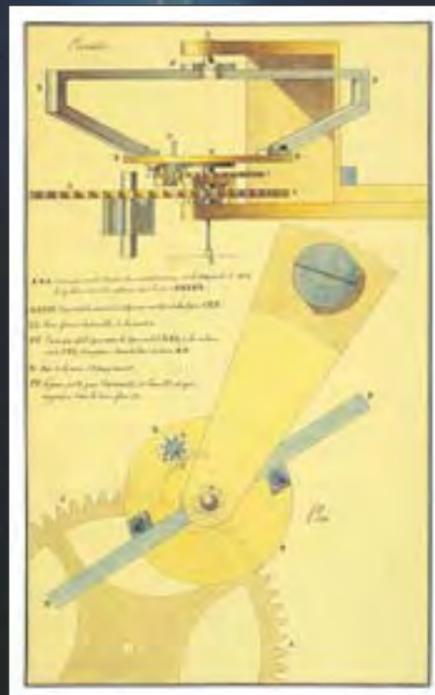
There is, with overtones of Aubrey Beardsley and the Hetzel-edition Jules Verne illustrations, a highly expressive representation of the Solar System, through which the central elements of the gear train and differential can be seen. It is hard to say quite how unexpected this design is in the light of Breguet's previous form and, to be honest, it is hard to work out just why the decision was





(Above) A CAD diagram of the ref. 5347PT's tourbillon cage and escapement. Note the 'Breguet overcoil' balance spring: the outer coil is raised and turned towards the centre, making the spring 'breathe' concentrically.

(Left) A cage assembly, very similar to that of ref. 5347PT, nearing completion at Breguet's atelier in L'Abbaye.



(Above) An original illustration from Abraham-Louis Breguet's patent application for his tourbillon invention - eventually filed by France's Ministry of the Interior in 1801. The cage, pictured here from the side and above, provides a mount for the escapement, which drives the cage's rotation - usually at a rate of 360° per minute. This eliminates positional errors on the balance spring when a watch is sat in a vertical position for any length of time. The cage is driven by the gear train, which turns co-axially to a toothed crown fixed to the mainplate. This crown serves to maintain the oscillator by means of a pinion carried by the cage. In conventional tourbillons, this pinion is normally that of the escape wheel.

taken to adopt this approach. Nevertheless, it is a beautifully conceived design that works well with the exposed movement elements.

Outshone by none

Having offered two such contrasting faces of the Double Tourbillon, it is as well that the movement inside is as worthy of comment as the exterior. Breguet accounts for the use of a double tourbillon by saying that the system reduces beat error by 50% through its differential system; the time displayed is the product of the mean rate between the two escapements. In theory, this means that any error in rate produced by one of the tourbillons will be part-compensated by the rate of the other tourbillon. The main caveats here are the efficiency of the differential system and, more importantly, the assumption that whatever is causing an error in one of the tourbillons does not have the same effect on the other. That the watch is a carousel, rotating the whole movement twice a day, doesn't add much to its timekeeping ability, but adds immeasurably to the fascination of the whole.

Laying theory to one side (again), the watch is due to be released to distributors and agents within weeks rather than months, meaning that Breguet is now confident that the system works (watches retailing for over £200,000 are simply not allowed to fail). As the watch is not on the market at the time of writing, we have to accept Breguet's word that the system meets expectations. And, as the launch of the Double Tourbillon carries a sense that Breguet is not to be outshone in the innovation stakes by the likes of FP Journe or Greubel Forsey, failure is not on the option list at L'Abbaye.

Not coincidentally, this is the difference between Breguet and the smaller houses. While it knows it is under more intense scrutiny, it also has greater resources to throw at an engineering or horological problem if required, and also wider access to design sources. If nothing else, the Double Tourbillon establishes Breguet's ambition and significance as bearer of the watchmaking art's most respected name. ◯