



The DB25T Tourbillon Regulator

# Turn it Over

With their latest watch, De Bethune's engineers have invested huge effort in creating a feather-light movement with unrivalled precision. And, of course, as is de rigeur with De Bethune watches, the DB25T Tourbillon Regulator not only impresses with its technical specs, but is also an a delight to look at. **Ian Skellern**

The DB25T is both technologically and visually stunning. The two-part dial comprises a blued steel display disc – sprinkled with a white gold galaxy of stars – surrounded by a silver hour and minute ring.



De Bethune has a reputation for delivering more than expected and its new DB25T Tourbillon Regulator is a case in point. Ask for the world and De Bethune gives you a galaxy. Quite literally a galaxy comprising a stunning, heat-blued titanium sky studded with a scintillating panoply of white gold stars. And the Tourbillon Regulator is a lot more than just a pretty face.

De Bethune's timepieces offer a rare combination of sublime aesthetics and technically ingenious and innovative movements, all of which are developed in-house. But you have to pay very close attention to the brand because, despite being small, it creates so many exceptional pieces that it is easy to miss one. And that's my excuse for not being as assiduous as I should have been when David Zanetta, De Bethune's co-founder, passed me one last watch at the end of presenting the De Bethune collection in January.

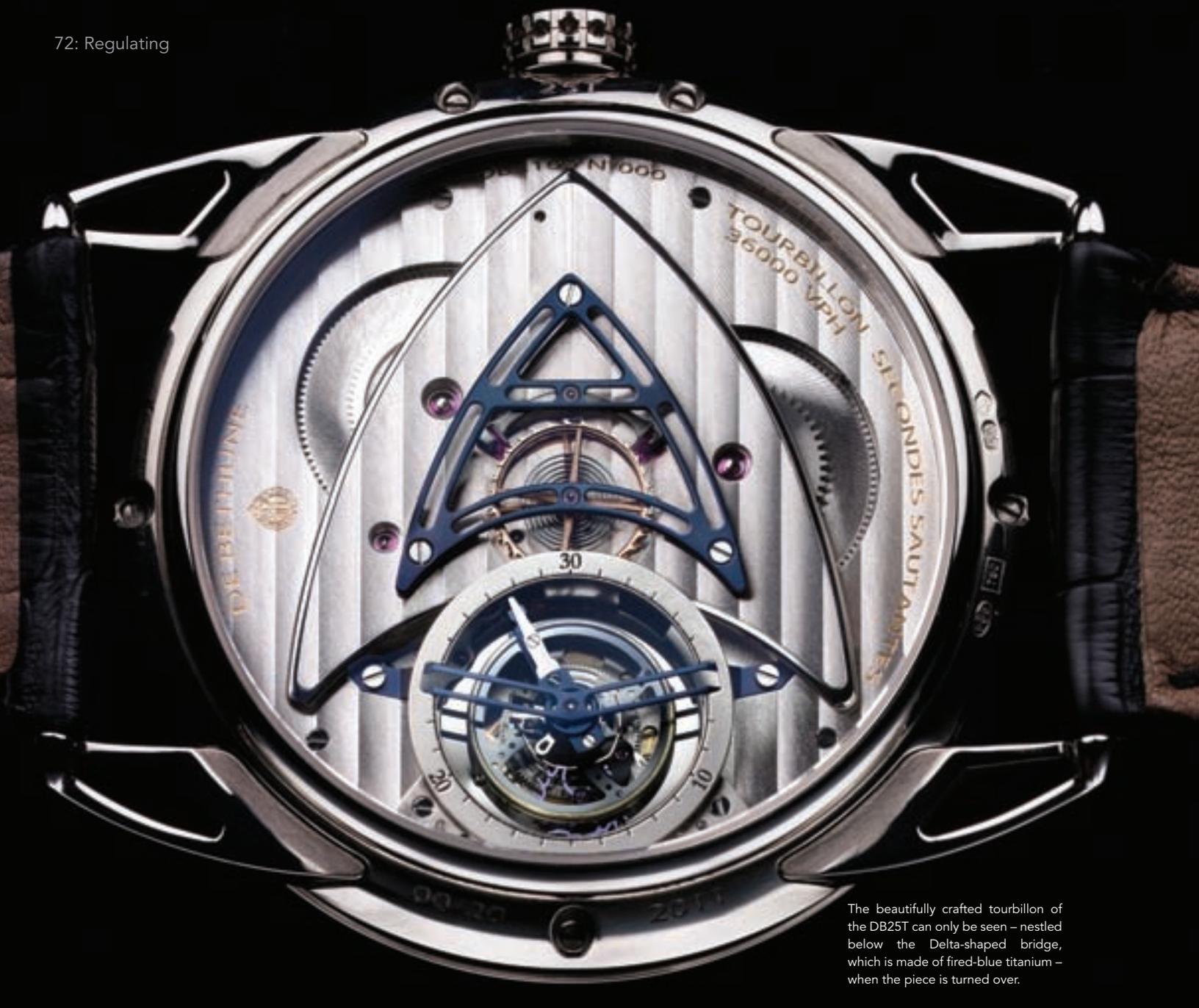
After a week visiting brands at the SIHH, my horlogically-jaded eyes took in the striking star-studded blue dial; the conventionally central hours and minutes; the less conventional jumping seconds; and the

5-day power reserve indicator at the top of the dial. I tried it on my wrist thinking it comfortable and nicely proportioned and mentally filed it away as yet another very nice De Bethune timepiece filling a niche in their collection.

Davide Zanetta must have noticed my lack of awe, because he quietly said: "Turn it over Ian, turn it over."

#### Full back

I obediently did as I was told and that's when the shock and awe set in. The first thing that grabbed my attention when looking at the back of the movement was the unusual blue triangular bridge echoing the form of the larger bridge it is mounted on. However, the unconventional escapement comprising a double gold wheel with four pallets (where usually there are only two) provides the first indication that this is a very special movement indeed. It is this escapement that provides the quartz-like stepping movement of the jumping seconds, which are also known as dead or dead-beat seconds. And then, of course, there is that tourbillon.



The beautifully crafted tourbillon of the DB25T can only be seen – nestled below the Delta-shaped bridge, which is made of fired-blue titanium – when the piece is turned over.

When it comes to escapements, all else being equal, faster is better, i.e. the faster the balance oscillates the less susceptible the timing is to shocks. Not surprisingly though, all else is rarely equal. There is (usually) a price to pay for speed in both increased energy requirements and increased wear. The only way to minimise those disadvantages is to reduce mass – the same reason Formula 1 cars are not just powerful, they are light.

Denis Flageollet, De Bethune's co-founder and Master Watchmaker *extraordinaire*, has developed what the company claims is the world's lightest tourbillon, with a silicon-titanium tourbillon carriage weighing in at just 0.18g, a quarter of the mass of conventional tourbillons. The tourbillon carriage comprises 50 components, the heaviest of which is 0.0276g, the lightest

just 0.0001g. Now that's closer to quantum physics than watchmaking!

The light mass of the tourbillon enables Flageollet to have the balance oscillating at 36,000 bph compared to the industry standard of 28,800 bph and to have the tourbillon carriage rotating in just 30 seconds instead of the more usual 60. All that and a power reserve of five days – you really can have your horological cake and eat it too.

#### **Making it jump**

The reason for this complex new escapement is accuracy. Historically, regulators were the reference timepieces others were set to and De Bethune wanted to push the envelope regarding accuracy in a mechanical wristwatch movement. Jumping seconds also have a historical background in relation to accuracy.

With the introduction of the pendulum in the 17th century, clocks became accurate enough to measure seconds. It was then not long before a hand indicating seconds on a long clock's dial signified a precision timepiece and a pendulum with a period – the time to swing forward and back – of two seconds (the most common) resulted in a single tick per second.

Jumping (or dead-beating) seconds with the second hand advancing in full steps of one second instead of an apparently smooth sweeping action was a very respected mechanical complication until the 1980s. However, its popularity died with the dominance of quartz movements that also stepped in full seconds. A smooth sweeping second hand then came to differentiate mechanical movements from quartz.

The outer silver ring is equipped with Arabic numerals, which serve to indicate minutes and Roman numerals, located closer to the blue disc, for displaying hours. The Breguet-style hands are made of hand-polished steel.



But now, with the Tourbillon Regulator, De Bethune has restored the jumping seconds to its honoured position as a symbol of mechanical accuracy.

With a case diameter of 44mm, the Tourbillon Regulator is a large watch, however, its thinness makes it very easy to wear – even on smaller wrists. Another little remarked on feature of De Bethune's timepieces is the incredible clarity of their special 1800 Vickers sapphire crystals; however I will not be paying much attention there because next time I am handed a De Bethune, I will quickly turn the watch over.



**Further information:** [www.debethune.com](http://www.debethune.com)  
[www.williamandson.com](http://www.williamandson.com)

Following in the footsteps of his father, grandfather and great-grandfather, Denis Flageollet (above left) was destined to become a watchmaker. The dream of creating his own horological works of art led to his partnership with David Zanetta (above right) who had been studying wristwatches since the 1960s and the creation of De Bethune in 2002.