

Social Climber

Can Seiko's brand status match the sheer luxury of the Spring Drive Sonnerie?

James Gurney

Seiko has a problem. Admittedly it is a problem to envy rather than otherwise, but it is a problem all the same, and it is all of its own making.

The story begins with last year's introduction of the Spring Drive. As you may have read in these pages or even seen in the flesh by now, the Spring Drive is much more than new technology - it is a new way of solving a problem that is at the heart of all luxury watchmaking: how to make a watch that is as precise as possible but also a human, crafted object?

By shrinking the electronic element to the size of an escapement assembly, Seiko made a watch that is so close to being a traditional watch as to make almost no odds at all. While there is a debatable difference, what is certain is the fundamental difference between the Spring Drive and the Kinetic technology that Seiko already produces. Where Kinetic movements are essentially quartz movements with a mechanical power source, the Spring Drive is a mechanical watch with something extra.

As with any idea that breaks from established precedent, making the Spring Drive work - a 19-year problem in itself - is

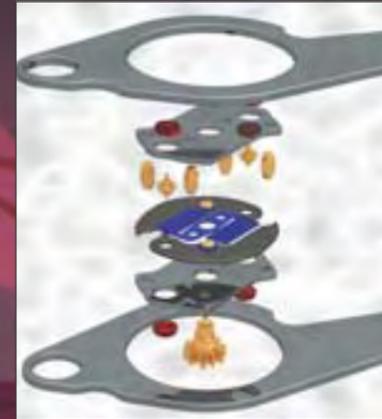
only half the story. Controlling how the idea is received by the outside world is equally important. Way back when, even the Sony Walkman was a hard sell because, horror of horrors, it had no record function - an objection that seems risible now, but one that nearly killed the Walkman at birth. More than a technically clever watch, Seiko's intention is that Spring Drive be perceived emphatically as a luxury product. However neatly conceived, the alternative would be gadget watch status, following a line through Kinetic back to calculator watches and the original digital chronographs. And you can be sure this is not future-stated in Seiko's corporate plan.

Sui generis

Seiko's awareness of the need to actively gild the Spring Drive with the tang of luxury informs every part of the production process and was particularly evident in the series of press and industry visits that Seiko organised last autumn. All told, some 80 journalists were taken to Japan to experience both the strength of Seiko's aspirations as a luxury company, the depth of the company's resources and, not incidentally, the cultural location of Seiko. Apart from the heavyweight industrial muscle at Seiko's disposal and the Swiss-style mountain locations, the most notable



Under the Credor brand, Seiko's new Spring Drive Sonnerie proves beyond a doubt that the Japanese brand has a rightful place in the luxury watch sector. Five of the hour-repeater/sonnerie watches will be made this year, retailing at ¥15m plus local taxes (approximately £70,000).



These two diagrams go some way to understanding the mechanism behind the Sonnerie's clever governor system. The governor regulates how fast the striking mechanism's mainspring unwinds, thus ensuring that the chimes are correctly paced. In normal striking watches, the governor has two centrifugal weights that are spun outwards when the chiming mechanism engages, rubbing against a cage and therefore slowing the chimes by friction. In Seiko's new watch, the governor has two blades (dark grey), which expand with centrifugal force when the going train is engaged. Sandwiched in-between two plates, the blades encounter a significant viscosity of air, keeping a constant rotation of 300 revolutions per second. Because there is no mechanical contact, the mechanism is quiet and stable, and the chime is clear.

Technical Specs

Case: 18 ct pink gold; 43.20 mm diameter; 16.00 mm thick

Movement: Spring Drive Sonnerie calibre 7R06; 88 jewels; 617 components; 37.00 mm diameter; 7.05 mm height

Functions: Three selectable hour-striking modes (hourly chimes announcing the number of hours; three-strike chimes at 12, 3, 6 and 9 o'clock; silent) and hour-repeating function

Power reserve indicators: Two; one each for the watch mechanism and the bell mechanism

Winding: Manual; 12 o'clock direction for watch, 6 o'clock direction for the bell

Accuracy: Monthly rate within ±15 sec (equivalent to a daily rate of ±1 sec)

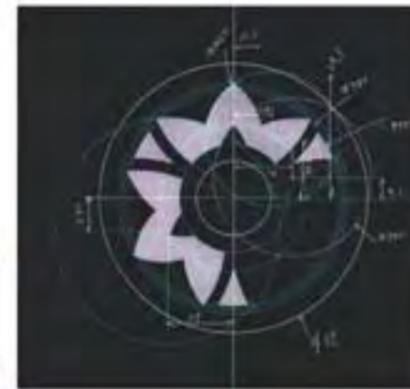
Power reserve: Timekeeping mechanism, approx. 48 hours; bell mechanism, more than 40 hours

(As announced, March 2006. May differ from actual product specifications.)

(Above) The upper bridge of the Sonnerie features a cut-out Japanese bellflower ('kikyo' in Japanese) - the flower of the city where Seiko Epson's Micro Artist Studio is located. One can also see the hammer here, underneath the 'Marche' power reserve hand. The Sonnerie's power reserve indicator is at 2 o'clock.

(Left) A Japanese orin bell, whose pure tone inspired the design of the Sonnerie.

(Right) The miniature orin bell used inside the Sonnerie instead of the usual circumferential wire 'gong'. A unique sound escape system allows the chime to pass through the case with little interference. Combined with the near-silent Spring Drive movement and a silent governor, the bell rings out with eerie clarity.



(Left) Preliminary sketches from Kenji Shiohara's Micro Artist Studio, which was set up in 2000 to develop luxury watches that convey Seiko's heritage. The design of the Spring Drive Sonnerie's bridges allude to a 'kikyo' bellflower floating down a river, evoking the continuous passage of time.

aspect of the visit was Seiko's transparent hunger to gauge how its guests perceived the new Spring Drive. This open-minded approach was an object lesson in itself (as well as being just a little flattering)!

Two points quickly emerged that were to dominate discussions in this direction. One was the need for the watches to be more overtly luxurious; there is little in the watches to suggest the rare level of skill required to actually assemble these movements. The second question concerned the name to appear on the dial - the 'Lexus' question if you like, after Toyota's difficult decision over how to brand its luxury car range.

As it turns out, the first of these questions had already been answered - just because you may have heard the word 'inscrutable' does not mean you understand it! While the visits

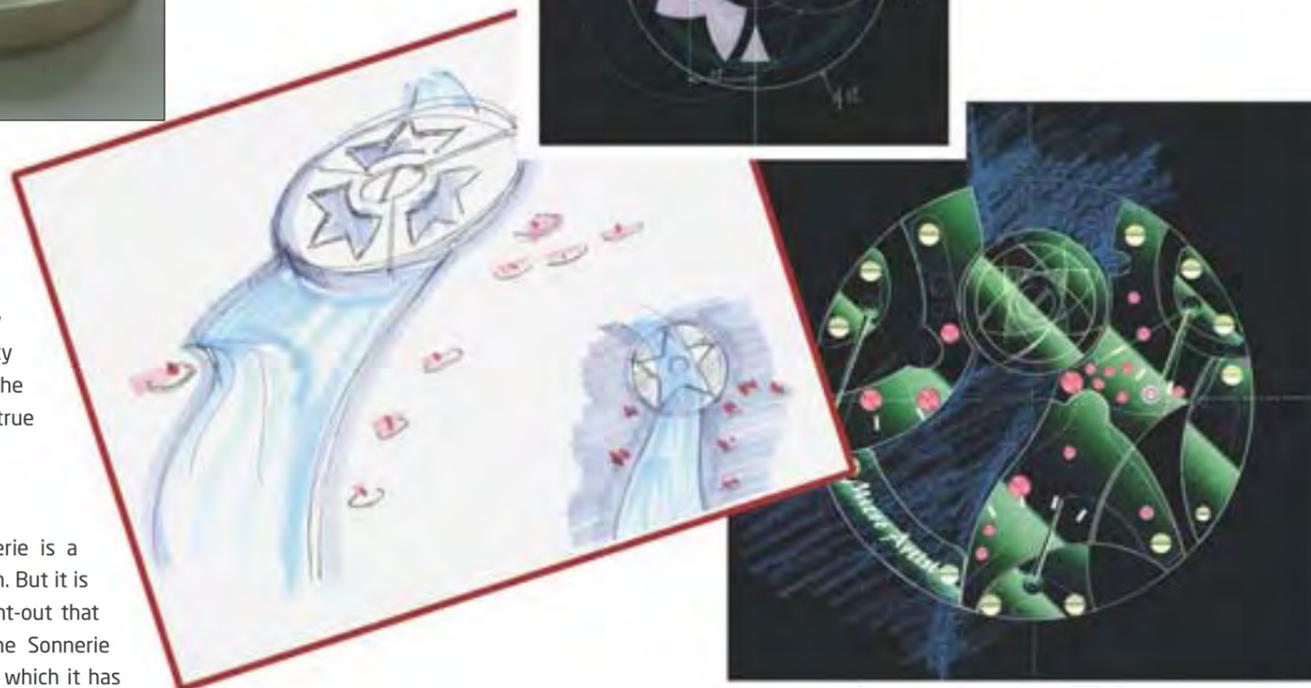
were going on, final touches were being put to a new Spring Drive that was unveiled at Baselworld 2006. And the result, the Credor 'Spring Drive Sonnerie', is one of the few watches I have seen that can be truly described as *sui generis*. It is this quality that answers the question as to whether the Spring Drive was going to be a gadget or a true luxury item.

Silence is pink-gold

As its name states, the Spring Drive Sonnerie is a chiming watch of more than average attraction. But it is much more than that. It is so cleverly thought-out that the watch is a pure delight. Importantly, the Sonnerie makes a virtue of the place and culture from which it has

emerged. From the Japanese 'kikyo' bellflower pattern cut into the bridge, to the chime of the tiny 'orin bell' that replaces the traditional wire gong inside, so evocative of Shinto's precise and delicate ceremonies, the Sonnerie could not have been made by a non-Japanese company. Just as Breguet has started to look to the aesthetic of the originals, so Seiko has looked at the traditions and crafts that surrounds it. The highly developed techniques that permeate Japanese crafts - from calligraphy to lacquer and porcelains - were the answer waiting on the doorstep.

Japanese metallurgy is perhaps the country's most intriguing craft, as it has proved very difficult to trace the origins of the techniques that underpin it. Archaeological finds showing interim stages in the development of techniques are notoriously thin on the ground. The variety of techniques is stunning, and some accomplishments over the centuries remain unsurpassed. It is not an idle claim to state that Japanese hand-forged carbon steel was and is among the finest produced by any people.





(Above) The hours can be heard on demand by pressing the button at 8 o'clock. Silent mode is selected by pushing the same button halfway down.

(Left and far left) New additions to the core Spring Drive range include these GMT models (£2,500), driven by the new calibre 5R66. The power reserve indicator is set deep into the dial so as not to obstruct the glide of the GMT and primary time-zone hands.

Japanese metallurgists are also adept at handling alloys, which have appeared in numerous precious artifacts – not least the clear-toned orin bells that inspired the Spring Drive Sonnerie. While orin bells are central to the performance of domestic ceremony, the critical point is that they are thought of both in terms of the sound they produce and the silence they counterpoint.

Nevertheless, dressing a watch up in the traditions of a sought-after and renowned craft would only amount to window dressing if the ideas in the watch itself failed to match those standards. Thanks to the small team of craftsmen at Seiko Epson's 'Micro Artist Studio' under Kenji Shiohara, the Spring Drive Sonnerie passes this hurdle with ease. As reviewed in greater detail in Issue 14, the basic principle of Spring Drive is to replace the escapement with an electronic equivalent (the 'Tri-synchro Regulator') that draws its energy from the mainspring and returns the energy in timed pulses, as would a normal escapement. In this case though, the pulses are through a braking system rather than the locking and unlocking an escape wheel. One strange side effect of this is the near silent operation of the movement.

The Spring Drive Sonnerie matches this ingenuity with two main achievements. The first is to design a mechanism that transmits the sound in as pure a manner as possible – a challenge met by a combination of architecture (the bellflower and open-face design) and materials (the resonant pink-gold case). But making

the pure tone of an orin bell audible would be pointless if the sound was masked by the whir of the governor as the sonnerie moves into gear. Thus, the second achievement of Shiohara's team was to come up with a silent governor system. In striking watches, the governor not only slows the rate of striking but also keeps the speed constant as the drive spring unwinds, normally achieved through centrifugal weights rubbing against a cage, which can produce a background 'hiss' to the chimes. Larger clocks however commonly use vanes to restrict the strike speed.

Seiko's imaginative approach has been to combine the two methods. In common with a conventional governor, blades expand under centrifugal force, however the blades do not brake against a solid surface. Instead, the speed of the rotor, some 300 rotations per second, and the sandwich of plates through which the blades pass, generate sufficient atmospheric friction to control the speed. There is therefore no sound to interfere with the pure sound of the gong. Combined with the already quiet movement, the sonnerie governor means that the chimes are eerily pure and long-lasting. Powered by a separate spring barrel, there are three selectable chiming modes: *en passant*, striking each hour on the hour; 'original', striking three times every three hours; and silent. There is also a button at 8 o'clock to activate the strike on demand.

All in a name

Ultimately though, it is the 'Lexus' question that gets to the heart of Seiko's strategy, both for Spring Drive and the company



Limited to just 200 pieces, the new Spring Drive Moon Phase (£3,500) provides a new interpretation of the 'circle' design concept, which characterises the whole collection. The blue mother-of-pearl dial evokes a night sky and the movement itself (inset) is engraved to portray the fan-shaped pattern of moonlight radiating out from the central glide wheel.



Can Seiko cope with this leap in status? The legacy of Seiko's quality is that millions of cheaper Seiko watches are still in circulation, making it harder to project as a luxury brand.

as a whole. Seiko has been steadily pushing brand prices up over the last 10 years (the original Kinetic Chronograph was priced on a level with or above mechanical chronographs from the likes of TAG Heuer and Omega), leaving lower price-points to be taken by sub-brands such as Lorus. The increasing quality of watches made in cheaper economies around South-East Asia has made this approach inevitable. In company terms, the Spring Drive will allow Seiko to stake a claim in the luxury segment of the market and make the appropriate adjustment to its price levels. The question is: can Seiko as a brand-name cope with this leap in status?

The legacy of Seiko's quality is that millions of cheaper Seiko watches are still in circulation and this makes it harder to project Seiko as a luxury brand. That the Spring Drive Sonnerie will be known as the 'Credor Spring Drive Sonnerie', while the original Spring Drive comes under the 'Seiko' name seems to show that the question remains unresolved. Credor itself is not an ideal solution as it has a reputation in Europe for being a not entirely

successful competitor to the likes of Longines. Another candidate mooted as the brand name to lead Seiko's charge into the luxury sector is Grand Seiko, which is used in Japan for the high-quality mechanical watches that Seiko produces. As both Grand Seiko and Credor somehow lack the glamour needed to support a luxury brand, the temptation is to suggest that Seiko manufactures a new brand name to go with the watches – an idea that is understandably viewed with suspicion at Seiko.

In any event, the Credor Spring Drive Sonnerie will be sold directly from Seiko Watch Corporation via its subsidiaries and will cost this year's lucky five ¥15m plus local taxes (approximately £70,000) – a luxury sector price without doubt, but actually very good value compared to other sonnerie and repeater watches on the market. The first production watch will go on show in Paris this November. Seiko Spring Drive GMT and moonphase models also go on sale this autumn, through normal distribution channels and at more earthbound prices. ◯