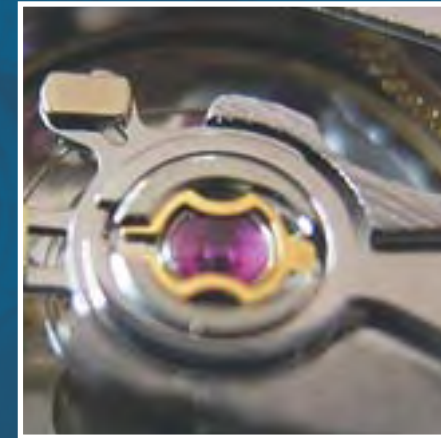


Movers & Shakers

Swiss Time Technology's new movements challenge ETA's hegemony

Theodore Diehl

QP examines the unlikely success of Swiss Time Technology – phoenix from Progress Watch's ashes – which has quietly staked its claim as serious contender to ETA's crown, as the industry's movement maker of choice.



In the shadow of some of the more venerable watch houses' acquisition, such as Breguet and Jaeger-LeCoultre, there have been some significant changes 'behind the dial' in recent years. While prestigious marques such as Girard-Perregaux have maintained the ability to produce movements in-house, many companies have come to rely – to varying extents – on movements brought in from the outside.

Produced to various different levels of completeness and finish, these movements may then be stripped down and rebuilt, often as the basis for far more complicated timepieces. These movements have been increasingly purchased from just one source: The Swatch Group's ETA

The reign of ETA

Despite its ubiquity, ETA offers truly exceptional quality for money. With additional personalisation such as rotors with company logos, new balance wheels, springs and a host of other improvements, base movements such as the 2892 or 7750 find their way into watches costing anywhere between £500 and £50,000.

With ETA controlling dozens of essential component suppliers, such as balance-spring makers Nivarox, there has been a

growing need for alternate sources of supply – all the more so now, given recent policy changes by ETA; perceived by many as taking advantage of their control over the market.

There are now several alternatives to ETA and its subsidiaries, either in development or already active. Many pinned their hopes on the early standard bearers, Progress Watch. When Progress opened its doors several years ago, the industry held its breath: would Progress be the knight in shining armour? Well, yes and no...

Room for Progress?

Despite a promising start, Progress' wonderful movements were produced in smaller and smaller amounts. Money disappeared, disputes regarding the intellectual rights to its famed tourbillon hit the courts, and the core of the company finally went into receivership. Until October 2003, that is.

The sale of various intellectual properties was negotiated and a new consortium was formed. Its name is Swiss Time Technology, or STT, and in addition to patents and other legal binds, it was able to take over Progress' existing building and machines, as well as its central core of knowledgeable employees.



(Left) On the left side, some of the exchanger's gears for the rotor's unidirectional winding mechanism are clearly visible, with the balance wheel, balance spring, mobile stud holder, adjuster and Incabloc protection clearly visible on the right. (Right) The back view of the 11.50 STT movement, with the ball bearings just visible as specks of light in the circular section around the rotor's axis.



After driving through a snowstorm, skidding most of the way on summer tyres and asking for directional assistance from the locals, I arrived at a plain building with no insignia of any kind. I was greeted by a receptionist with a ring in her nose, given a cup of Nescafé (in caffeine-rich Switzerland, a virtual no-no) and was swept into a bare, business-like presentation room.

Perhaps due to the ghosts of Progress' past, it was clear that this new operation was taking the no-nonsense approach. There are no frills here: in a spacious and highly organised building, youthful workers were busy at workstations and the newest machines imaginable were whirring away behind glass, in rooms resembling those more suited to the manufacture of integrated circuits.

Two movements today, tomorrow the rest

At present, STT produces two movements – both of which are available in different varieties and finishes. And what beauties they are!

STT's workhorse – which should soon count on widespread popularity – is the 11.50 lignes automatic. This movement is available in 10 different versions, with such variants as sweep seconds, small seconds at 6 or 9 o'clock, big date window or regular quick change date. The height varies from 3.6 mm for the base movement with quick-change date and sweep seconds, to 5.25 mm for the large date version with either sweep or small seconds.

The finish of the basic type is impeccable. The first eye-catcher is the standard use of Geneva stripes on all the bridges and the rotor, with the gilded mass on its outer edge separately attached. With a high beat rate of 28,800 vibrations per hour, autonomy of 50 hours and 22 rubies, its 'out of the box' accuracy is already worthy of a chronometer certificate, with exceptional results to be expected after good adjusting. Perlage embellishes much of the visible remainder of the movement.

The overall design of this calibre is not groundbreaking; but divergence from the tried and trusted tends not to be desirable in a basic movement such as this. Details such as a newly designed, unidirectional winding system and some fine improvements in the traditional date change mechanism can, in any case, be seen as benefits.

Complemented by details such as highly polished screws, the STT 11.50 base movement is in a different league to that of any equivalent product on the rolls at ETA. And this is precisely STT's strategy. Herbert W Arni, a member of the STT board explains: "Our aim is to fill the existing gap for the high-end brands, not compete with ETA."

"We are offering high-end watch brands a top-notch product that fits their pricing expectations and, most importantly, the philosophy of the high-end wristwatches they produce. We intend to release a new movement each year to cover the entire gamut of *haute gamme* movements for the industry."



(Left) The 13.75 calibre STT movement, with the tourbillon mechanism clearly visible at 6 o'clock. (Right) The 11.50 calibre, with date dial clearly on show, as well as a surprisingly rich variety of finishing techniques employed for such relatively mass produced movements.

STT 13.75 tourbillon

The second movement is the famed tourbillon, developed by the multitalented Elmar Mock – perhaps best known as the non-existent inventor of the Swatch. What makes this tourbillon special is the application of micromechanical techniques that allows a production process for tourbillon construction with far less handwork than is normally needed. This involves using components with a flat reference plane (no vertically curved edges or rounding), the integration of the tourbillon gearing as a direct part of the cage's underside, the use of gearing with internal teeth for the pinion of the escapement wheel and the addition of a tiny ball bearing. The latter is effective in keeping friction down, given the tourbillon carriage's extra load in comparison to a normal escapement.

With the tourbillon market showing endless growth, it seems that STT's arrival has been perfectly timed. Its tourbillon is offered in 12 different versions in permutations including a flying tourbillon, classical tourbillon, manual or automatic winding, with or without small seconds at 12:00 or even in regulator style with hours and minutes at 12:00. The modular construction means that very extensive customisation is avail-

able to fulfil virtually any watch brand's desires. The movement itself is not particularly flat, (but neither are most tourbillons to begin with), coming in at 6.50 mm as an automatic and 5.40 mm in the manual winding model. But it does have two winding barrels offering 72 hours autonomy. With 13.75 lignes, it is also a perfect size for the men's market, although probably too large for the majority of the women's market.

The price range for watches made with this movement will be high, yet significantly lower than comparable tourbillons elsewhere. For a highly decorated and specialised tourbillon movement, STT will charge about £6,500, clearly keeping the completed watch in the high-end price segment. The basic, unadorned version will be much lower, bringing the tourbillon within the reaches of many more collectors.

While some of the Swiss newspapers dubbed the movement 'Trabillon' when it was unveiled 6 years ago – a jibe alluding to the former DDR's 'car for the people', the Trabant – STT offer a fascinating movement that offers high accuracy, quality and innovation. A tourbillon for the 21st century and a welcome newcomer to the Swiss watch industry and consumer alike. ●



The back of the 13.75 calibre, showing anodised screws and perfectly aligned Geneva striping.