

# Jewellery

## FOCUS

April 2008 [www.jewelleryfocus.co.uk](http://www.jewelleryfocus.co.uk)



Please visit us:

At the Basel World Watch and Jewellery Fair  
April 03 to 10, 2008 Hall 1.1 Stand D41  
[www.luminox.co.uk](http://www.luminox.co.uk)

**LUMINOX LIGHT TECHNOLOGY**  
SELF-POWERED ILLUMINATION

Swiss  Made

Fashion trends from London and Paris  
Plus: Pearls, software, and affordable cult watches

# China chic meets Switzerland

The Swiss watch houses may have faced their biggest challenges back in the 1970s when the mechanical movement looked set to all but disappear. Perhaps some innovative watches coming out of China right now hail another revolution for the watch market

For many, the tourbillon movement represents the very pinnacle of modern horology. This great invention, conceived by Abraham Louis Breguet in 1795 to overcome the effects of gravity on the accuracy of mechanical movements in pocket watches, has now become a signature movement in the collection of most Swiss watch houses. Audemars Piguet, Vacheron Constantin, Blancpain all boast at least one tourbillon timepiece.

Of course, they are all beautiful watches but command staggering price tags, often in excess of £100,000. For most customers, these watches are way beyond their means, even if they do have a burning desire for a piece of horological history and magnificence.

The solution for many of these amateurs of watch-making excellence is the arrival of 'China chic', perhaps most notably in the watches produced by KULTUHR, a company, based in China, founded by Marc Rogivue.

Rogivue, a Swiss by birth and a watchmaker by trade, has designed and assembled an innovative range of tourbillon-powered watches that combine Chinese style with Swiss quality.

Of course, many may dismiss this development out of hand. A Chinese tourbillon? But remember, these are not competing on the same playing field as the Swiss classics: KULTUHR's watches are not the counterfeits and fakes so dreaded by the established industry; they are watches in their own rights, with their own design and quality, and with a retail price tag of around \$2,500, who is arguing now?

The watch we tested was a surprisingly classic model in appearance, although this is not typical of KULTUHR's range, which encompasses a wide variety of styles and colours. Nevertheless, it came packaged in a very funky white wooden box, emblazoned with a five-point star, hinting at China's Maoist symbolism. It is mounted on a pad



**Above: Mark Rogivue has taken his tourbillon expertise to China**

fitted with an LED, which glows underneath to highlight its very beautiful movement.

Our test model came in a respectably chunky stainless steel case, finished and polished to a high standard. To the back and front there is a sapphire crystal revealing the workings of the tourbillon. The movement itself is nothing less than hypnotic, counting off the seconds as it rotates on its endless journey.

The watch has a classic white enamel-style face with Roman numerals and Breguet-style hands, and there is an aperture cut in the face to reveal the tourbillon. It comes fitted with a quality leather strap complete with a deployant clasp. The strap is held in place by two bars neatly fitted with four cabochon-style sapphires.

All in all this is a remarkable watch at a remarkable price. Dare we say it, but we found that, over a seven-day period, it kept better time than a Rolex – if that gives you any indication of its quality. The only (small) complaint concerned the fiddliness of the strap and deployant clasp, but once the watch was on the wrist it was fine.

For the retailer, this watch, along with the rest of KULTUHR's range represents an exciting opportunity. The pricing of these watches brings engineering excellence firmly into the reach of the man on the street. The company offers good margins, and can supply significant support when it comes to promotional material.

There will be no escaping the fact that many customers, particularly those watch enthusiasts with an unshakeable loyalty to all things out of Geneva, will shun this watch. But - and this is a very big but - these are fantastic watches at fantastic prices. The build quality and presentation values of this watch are so high; it will sell and sell and sell. The only thing standing in its way is letting the world know it's out there.

*For more information visit: [www.kultuhr.net](http://www.kultuhr.net) »*

## Tech Spec

**Movement:** Manually-wound flying tourbillon

**Display:** Central hour and minutes hands; seconds on flying tourbillon

**Power Reserve:** Approximately 50 hours

**Decoration of Movement:** Cotes de Geneve, blued screws

**Strap:** Choice of hand-sewn leather or silicon, or silicon rubber with folding butterfly stainless steel buckle

**Glass:** Double-domed sapphire crystal on front and sapphire crystal exhibition back

**Water Resistance:** 5ATM or 165 feet

**Warranty:** 2 years international warranty

**Limited Edition:** 99 pieces worldwide and engraved on movement



**Building a tourbillon is viewed as testament to a watchmaker's skill**

### What Is a Tourbillon?

A tourbillon is a high complication and remains one of the most difficult and complex movements to master. A tourbillon (meaning “whirlwind” in French) is a device invented in 1795 by Abraham-Louis Breguet to counter the effects of gravity and other forces that affect the accuracy of clocks and watches. The tourbillon was originally designed to eliminate errors of rate in pocket watches, which were kept in vertical positions for long periods of time leading to deviations in timekeeping due to gravity. Breguet’s solution was to balance out all differences of position by developing a small “clock within a clock” by mounting the delicate balance wheel and its components in a delicate lightweight carriage which rotated on its own axis, whereby the negative effects of gravity cancel themselves out allowing many watches to attain chronometer-like accuracy. To this day, the complex construction and precision required to create a tourbillon remains a specialty of the most gifted watchmakers.

### How does a Tourbillon work?

When a watch is in the vertical position, gravity either accelerates or slows the balance and escapement mechanism that regulates the speed of rotation of the wheels. A tourbillon

is comprised of a mobile carriage or cage containing the regulating mechanism (balance wheel with hairspring) and the lever escapement, with the balance in the center, and this mechanism rotates the wheels. The escape pinion turns about the fixed fourth wheel.

By mounting the escapement in a rotating frame, all errors are reproduced and thereby cancel the effect of gravity when the escapement is rotated 180°.

The frame makes one revolution per minute, thus annulling errors of rate in the vertical position. The rotation of the whole device around the axis of the frame suppresses the effects of friction or other effects caused by unbalanced components and gravity as all parts of the escapement are equally exposed to these influences.

### What makes a Tourbillon watch worth buying?

Historically, tourbillons have commanded top prices and were out of reach of all but the extremely wealthy. Very few watch houses have the time and experience to produce tourbillon watches, driving up prices even higher.

Watch houses usually produce a few dozen pieces of tourbillon watches each year as only the most skilled watchmakers can make the handcrafted movement. Considered one of the most complex watch complications, tourbillons are prized for their engineering and design principles.

Building a tourbillon is viewed as a testament to a watchmaker’s skill and the sheer intricacy and achievement of such miniature handmade mechanisms makes the movement one of the most valued complications.

The higher price is attributable to the complexity of the tourbillon mechanism, which is created within extremely tight mechanical tolerances with specialized tooling. Crafting a tourbillon requires more parts and time than in other movements.

Dedicated tools and machinery are used to manufacture tourbillons and special lightweight and durable metals are required. It is critical that energy expenditure be at a minimum as the same energy from the mainspring to power the gears is also needed to move the tourbillon. Any instability or disturbance in this energy flow will decrease the accuracy of the watch. Even to adjust the tourbillon movement requires specialists who have to disassemble and reassemble the tourbillon to regulate the balance.