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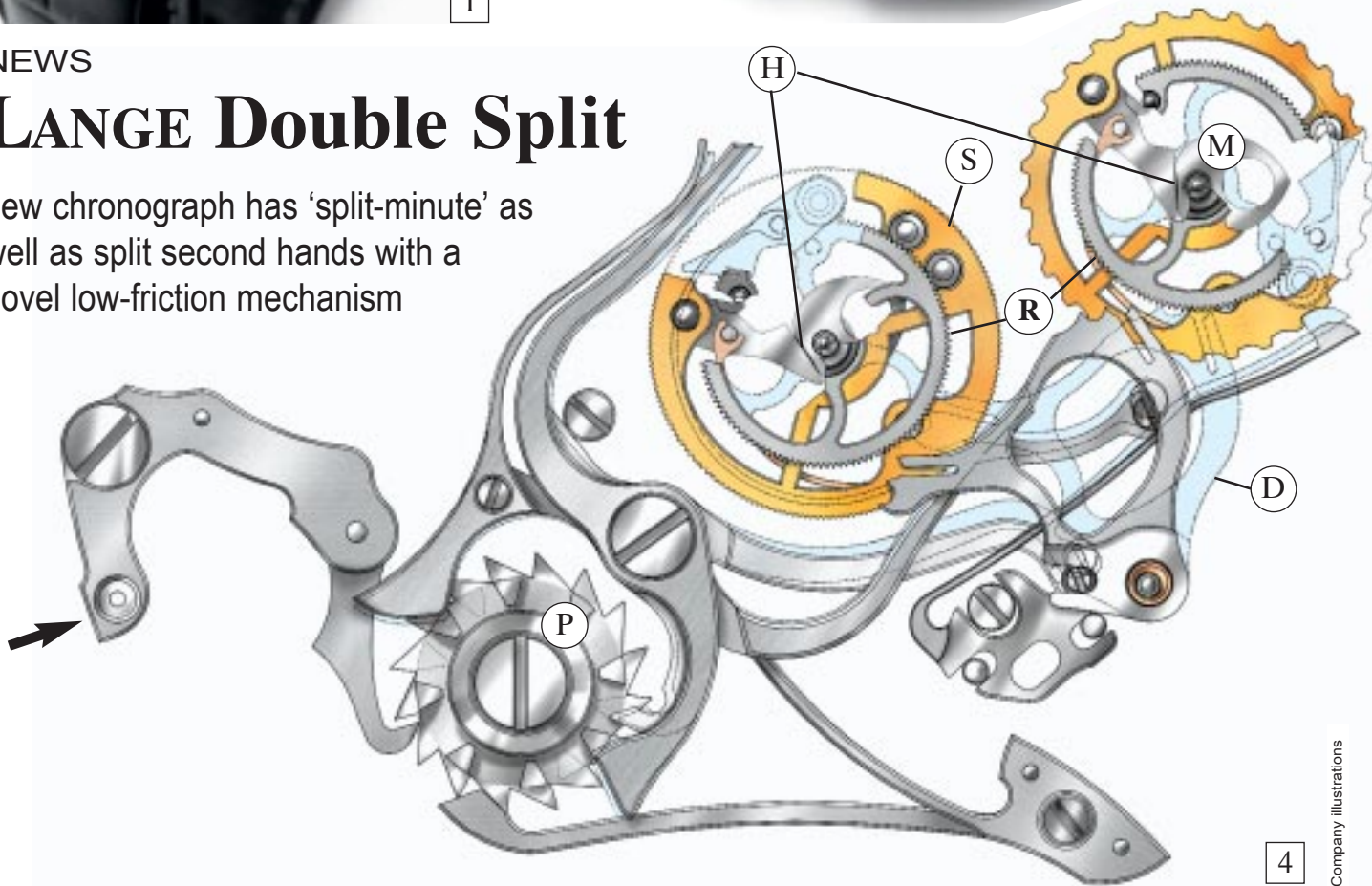


2

NEWS

## LANGE Double Split

new chronograph has 'split-minute' as well as split second hands with a novel low-friction mechanism



4

Company illustrations

The LANGE 'Double-Split' was launched at SIHH in Geneva in April. As well as the extra central seconds hand, this chronograph has an additional hand on the minute recorder dial to enable lap times of several minutes to be recorded, 1. The small subsidiary dial at 12 o'clock shows the state of wind. The 40-jewel, 3Hz (21,600vph) movement, 2, has the typical LANGE flourishes: engraved balance cock, blued screws, angled flat-polished steel work, and jewels set in gold chatons secured by screws. New developments are: the free-sprung balance adjusted by 'regulating cams' (the word 'Giromax' is registered to PATEK PHILIPPE), the balance spring is made 'in house' and attached to a 'balance spring clamp', 3, (patent applied for) rather

than a stud. The clamp grips the end of the balance spring without the kinking caused by pinning and is readily repositioned on the spring (note the slotted screw). The whiplash screw and tail is for beat adjustment.

The basic chronograph function is controlled by one column wheel (movement, upper left) and the split function by another (P, in the diagram). The chronograph wheel, 2C carrying the centre seconds hand (not shown in 4) rotates with both S and R when the chronograph is running, as do the minute counters, M. The split hands are kept aligned with their fellows by feet pressing on the heart shaped cams at H. When the split function is activated, by the pusher

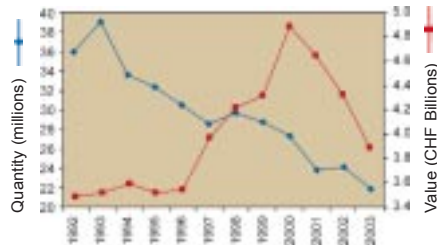
# Swiss Watches & Repairers

## Mechanical watches take lead role as quartz plunge

Mechanical watches



Quartz watches



3

Figures compiled by the FEDERATION OF THE SWISS WATCH INDUSTRY (FHS) show that in each of the last three years the export of mechanical watches, although only a tenth of the total, has exceeded the value of quartz watches. Moreover this value has been maintained while the value of quartz watch exports has plunged.

This is quite remarkable. It is as if the sale of candles had exceeded that of light bulbs, or of horses that of motorcars; the buyers of Swiss watches are opting to spend more money on products which perform their basic function less efficiently. It demonstrates that the watch is far more than a timekeeper, it is an indulgence, a form of self-expression, an absorbing interest, a tribute to human ingenuity in a traditional form.

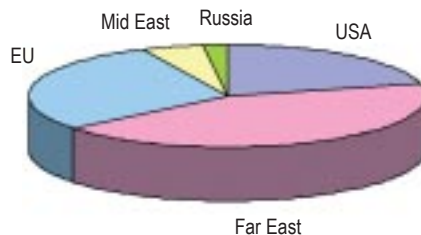
Last year total watch exports (24.5 million) were down 8.4%, and their value, at CHF9.8B, was down 4.4%. The proportion of mechanical watches however increased from 11.3 to 12.4% and they yielded more than 58% of total value. The graphs above show that during the 1990s both quartz and mechanical watches moved up-market as the number produced declined but their value increased. Mechanical watches have proved far more resistant to the post 9/11 - 'War on Terrorism' market than their quartz cousins.

Looking on a world scale, the Far East, remained the major importer of Swiss watches with nearly half destined for Hong Kong and the bulk of the remainder for Japan. The EU bought more Swiss watches than the US. The major market in the EU, Italy, along with Germany and France, was 10% down on 2002. Only the UK and Spain saw watch imports growing.

These figures are not broken down by categories but if the UK, taking 7% of Swiss watches by value, took a similar proportion by number, that would be about a tenth of the 18.4 million watches sold in the UK last year for an average price of just £38. But although 'luxury watches' (retailing at over £500) were a mere 3% of the numbers sold they yielded 56% of sales - at much higher profit margins! Sales are

*Alan Burtoft, ROLEX Service Manager for GOLDSMITHS GROUP, had a stand at Upton Hall for the Leap Forward Show, looking for watchmakers and promoting watch repair as a career. He reported a good response in both areas.*

Swiss Watch Exports: World



Swiss Watch Exports: Europe



FHS

increasing, as are the numbers of the people over 54 who appreciate, and can afford, such watches. That is the importance of high priced watches that will be cared for and that is why the industry needs more watch repairers. □

T.Trefry



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(arrow), column wheel **P** is rotated and the associated levers move to the positions shown in blue. Both **S** and the outer wheel on the minute counter **M** are clamped. In other split-second movements the lightly sprung foot at **H** rides over the heart-shaped cam while the split time is noted. **LANGE** avoid this added load on the movement, which reduces balance amplitude and may interfere with timekeeping, by having the feet spring out of engagement. This is achieved by the complex lever **D** which has spurs that move in to engage the wheels **R** and rotate them about 20°. The mechanism for this is shown in 5 and 6 (shown upside down with respect to 4), the rotation lifts the feet to the rim of the wheel.

When the split function is terminated by a second press on the pusher the clamping action is released, the wheels **R** rotate to their original positions as the curved springs (in 5 and 6) press the feet onto the heart shaped cams to realign the split second and minute hands with their fellows. □

