

# PRESS RELEASE

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WATCHMAKING INNOVATION : A WATCH THAT NEEDS WINDING ONLY ONCE A MONTH

Vaucher Manufacture Fleurier and CSEM launch a

## **MECHANICAL MOVEMENT WITH AN EXCEPTIONAL POWER-RESERVE OF ONE MONTH**

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### **VAUCHER MANUFACTURE FLEURIER AND CSEM LAUNCH A MECHANICAL MOVEMENT WITH AN EXCEPTIONAL POWER-RESERVE OF ONE MONTH**

Fleurier and Neuchâtel, 15 September 2014 - A perfect partnership: the watchmaking skills of Vaucher Manufacture Fleurier (VMF) combined with the creativity of CSEM and its mastery of silicon technologies to produce an invention which drastically increases the power-reserve of the mechanical watch. Culmination of a project initiated seven years ago. Vaucher Manufacture Fleurier has drawn on all its watchmaking know-how to industrialize a revolutionary mechanism developed by CSEM to replace the traditional Swiss lever escapement. The movement is based on a very advanced technology and merits being proven on an industrial scale: the manufacture therefore plans to release the first movements within a three-year timescale.

### **AN EXCEPTIONAL POWER-RESERVE AND PERFORMANCE THANKS TO FLEXIBLE ARTICULATIONS**

Structures on flexible guides are particularly suitable for providing precise, frictionless movements, without the use of lubricants and without wear. Convinced that these advantages could be usefully exploited in micro-engineering and precision watchmaking, Pierre Genequand, a physicist at CSEM, devised a new type of mechanical regulator which uses flexible structures both in the escapement and the oscillator. The major benefit of the regulator proposed by Pierre Genequand is that it drastically reduces the energy consumption of a watch movement. The challenge of adapting such an innovation to the scale of a wristwatch was overcome by combining the excellent mechanical properties of silicon with entirely frictionless pivots mounted on flexible articulations, both in the escapement and the oscillator. In the final analysis, the owners of a watch movement powered by this regulator will need to wind their watch just once a month.

## CONCRETIZATION OF AN IDEA FIRST MOOTED 10 YEARS AGO

CSEM is pleased to see the fruits of a decade long collaboration in action. *“This is a wonderful meeting of minds with a watch industry partner that has the necessary expertise to turn our invention into an innovation, i.e. a prestigious product which meets its customers’ expectations,”* said a delighted Mario El-Khoury, CEO of CSEM. *“The Genequand movement adds a new invention to the history of mechanical watchmaking.”*

## APPLIED RESEARCH MEETS LUXURY PRODUCT

Familiar with the production of mechanical movements that use a traditional escapement through the work of its sister company atokalpa, Vaucher Manufacture Fleurier encourages the use of silicon where traditional technologies are less efficient. In the present case, Jean-Daniel Dubois concludes: *“The Genequand escapement is an innovation which gives the traditional mechanical watch an exceptional power-reserve. VMF, in its capacity as a high end movement manufacturer, proves its determination to improve still further the performance of the mechanical watch. The Genequand regulator incorporated in a special movement will be marketed by our sister brand Parmigiani Fleurier for an exclusive period. The system will then become available to other clients, powering calibres specifically developed to receive it.”* The policy of innovation followed by the Fleurier motorist guarantees numerous benefits to its clients, not least the ability to stand out in a world where authenticity and tradition are of paramount importance.



A manufacturer of high-end mechanical watch movements, VMF is happy to describe itself as a prestige motorist. It manufactures the heart of the watch, an assembly which itself consists of several hundred components. The vertically-integrated firm is responsible for the complete production and quality control of watch movements thanks to a production capacity which combines innovation and tradition. VMF is majority owned by the Sandoz Family Foundation and Hermès International. The manufacturing arm of Parmigiani Fleurier, a partner of Hermès and a supplier of movements to prestigious watch brands, it has a 200-strong workforce and trains 15 apprentices. Through its Vaucher Private Label entity, it is a strategic tool for brands wishing to gain access to high-end watchmaking.

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CSEM is a private research and development institute specialising in microtechnologies, nanotechnologies, microelectronics, systems engineering, photovoltaic technology and information and communication technologies. CSEM has more than 400 highly qualified employees working at CSEM sites in Neuchâtel, Alpnach, Muttenz, Landquart and Zurich.

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