

THE SORCERER'S APPRENTICES



Located in Le Sentier, in the Vallée de Joux, amidst fairy-tale houses and postcard landscapes, there is the Jaeger-LeCoultre Manufacture.

In this mysterious and intimate place where time seems to have frozen, craftsmen are enthralled doing their job. Visiting it is a unique experience, difficult to put into words.

TEXT AND PHOTOS BY SERGIO ZAGIER WITH THE COLLABORATION OF CLAUDIA HERRERA

Lake Joux, on the border with France, is surrounded by small villages no larger than hamlets. One of them houses one of the leading brands of haute horlogerie, Jaeger-LeCoultre, combining classic designs with groundbreaking developments like the Gyrotourbillon or the 55 complications in the Hybris Mechanica.

The Manufacture comprises several buildings from different periods, added as the company grew and accommodating about 1,000 people. They are connected by a modern glass structure – the complex's most remarkable architectural feature. To

visit the manufacturing plant you need a special permission – plus a card, an overall and, of course, a guide.

Duly accredited and wearing the right outfit, we entered Jaeger-LeCoultre's Wonderland with Marketing and Retail Manager Eduardo Maclean, an outgoing Argie everyone seems to like. He guided us through the maze of rooms flanking the halls on each floor. There are windows instead of walls, which means you can see the workbenches and tables, the technicians and artisans stooping to look through a microscope or manipulate tiny

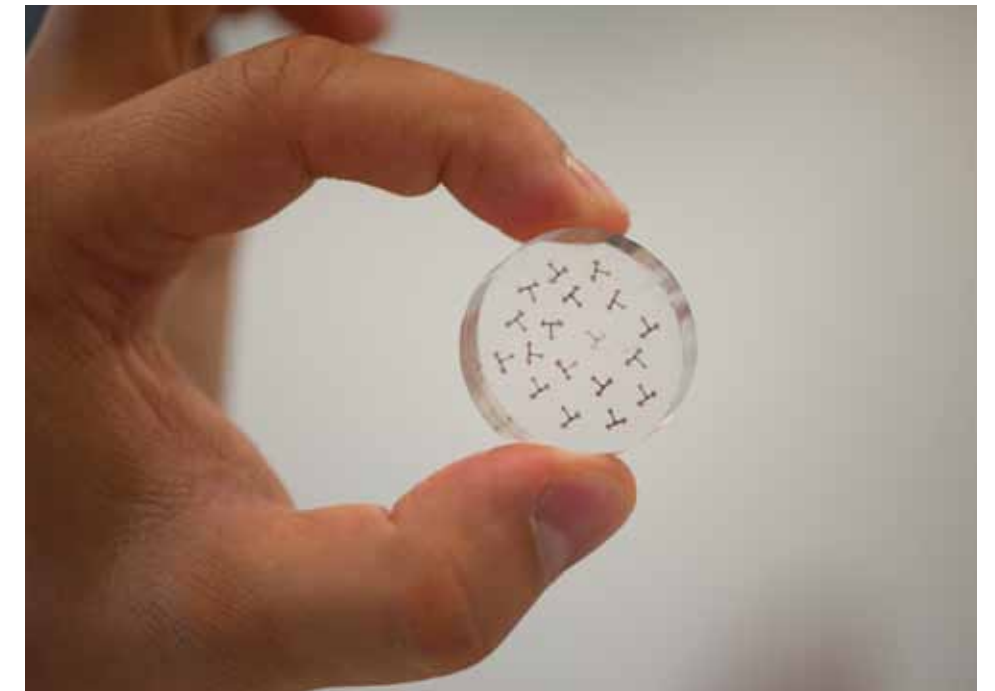
tools. They are all performing specific tasks and grouped accordingly. Some rooms have more than 20 workers, whereas in others there are only a few experts working on the bigger parts. Setting up the spiral in a flying Gyrotourbillon, for instance, takes a whole working day, and some complications take six months to assemble.

Through the glass

The manufacturing, assembling, grand complication, engraving, enameling, design and control workshops operate in a silent, well-organized, neat and friendly environment. The workers there answered our questions about tasks or components and they even allowed us to take pictures.

When we asked about watch repair, we got a surprising reply: 'The watches in the basic collections can be fixed at regional repair shops; they don't need to be brought to Switzerland. If necessary, the watch comes to the assembling workshop, where it is inserted between the new watches being made.' What about grand complications? 'They can only be fixed here, in Le Sentier. If the watchmaker who assembled the watch in the first place still works here, he'll be in charge of the repair work, no matter how long it's been since the watch was manufactured or bought.'

Everybody knows wristwatches carry tiny components. What is less known, however, is that the cogs, springs and screws are handled individually before they can qualify to become a part of a Jaeger-LeCoultre watch. Sugar grain-sized screws with a slot carved at a precise angle, 3mm escapements that must be hand polished before adding the ruby pallets (which are still fixed the old way, using lacquer), individually decorated bridges whose motifs no-one will see, calibers with intricate designs... All these details make you take off your hat to traditional watchmakers. Moreover, Jaeger-LeCoultre belongs to the select group of Manufactures producing virtually every component in their calibers.





Master craftsmen

Christian Laurent is the head of the watchmaking specialties workshop at Jaeger-LeCoultre. He has worked for the firm for 40 years. Proud and enthusiastic, he talked about the brand's new tourbillon development: the Sphérotourbillon – a spinning tourbillon allowing for flatter, lighter designs. 'The challenge was to come up with watches that were thinner than those with the Gyrotourbillon 2. With the new tourbillon concept, a multi-axis spinning tourbillon, we counter the effects of gravity with a thinner mechanism.' The result was a highly accurate caliber in a flatter case.

Christian and Eduardo placed several movements under a magnifying lens connected to a widescreen. 'The Duomètre à Sphérotourbillon is a masterpiece, with two independent mechanisms, each with its own source of energy, but sharing a common regulating organ,' Eduardo said. 'The chiming solution is just brilliant,' Christian added, sounding a Grande Sonnerie complication and telling how metal and glass had to be fused together to prevent sound from fading within the case – the classic nightmare of watch designers.

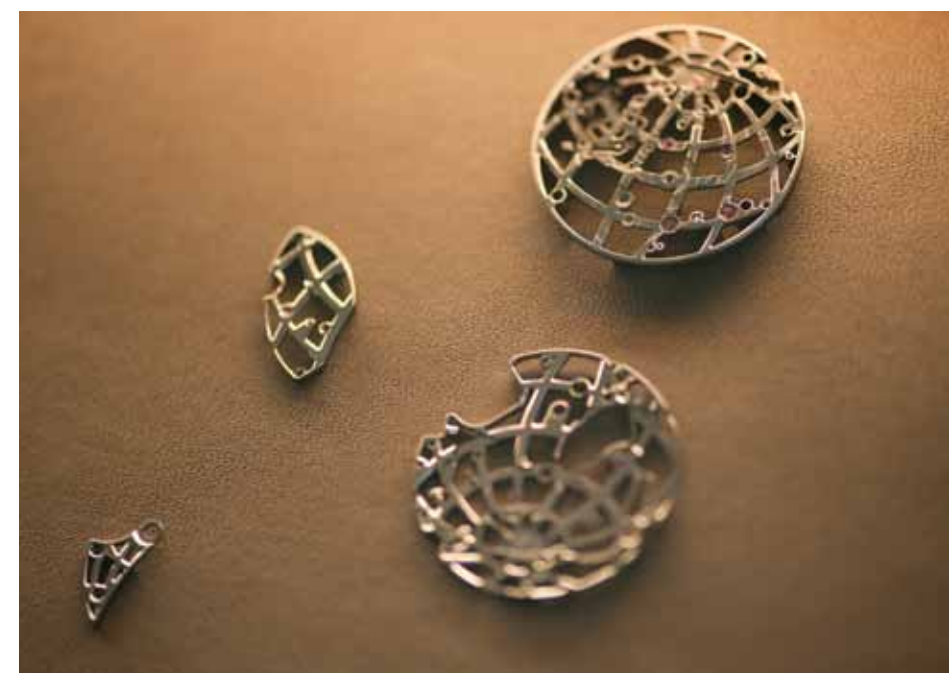
We also visited the small enameling workshop, which is temporarily located in a house down the main building's street. It is a more intimate area, with two or three small rooms – something like a provincial repair shop. You would never guess they make miniature works of art here. We were welcomed by master enameler Miklos Merczel, who was instructing a few apprentices in their teens, trying to learn a *métier d'art* almost lost and found by a few Manufactures. They paint using a microscope and then fire the pieces in an 800°C kiln. Only time can tell what the result will be; either you

get your design or the material collapses. Piece after piece. No industrial processes here. A tray held a few finished works: Art Nouveau images by Alphonse Mucha and other more or less known paintings. Finished enameled pieces then make their way to the assembling workshop, where they match their corresponding watches as dials or case backs.

Treasured moments

The area dedicated to the Atmos clocks – eternal, calm and stable, using a torsion pendulum for less energy consumption and featuring an austere design – is amazing. Several clocks from the 1930s sit on the shelves, waiting for their turn to be repaired, and pieces ready to undergo quality control (new models you can only see in pictures). To show us how the Atmos capsule, the metal bellows and the mechanism work so that the clock can run for years without human intervention, Eduardo had a disassembled clock and a bowl of ice on a table. He submerged the bellows (made of a Manufacture-developed alloy) in the bowl to show how the volume changed as a result of temperature variation. In normal circumstances, the Atmos gets the energy it needs to run from imperceptible temperature and pressure variations in the environment.

Last but not least, the Manufacture houses a small museum. On one of the walls, a board describes the 3,331 operations required to put together the Caliber 382, the movement created for the recently launched Duomètre à Sphérotourbillon. This and other developments released on a regular basis help keep Jaeger-LeCoultre's aura untouched, so that you can identify the watches even before seeing the classic logo on the dial. Jaeger-LeCoultre's *Grande Maison* is a place where technical innovation, high manufacturing and assembling standards and low-profile design are mixed into the perfect combination to attract connoisseurs rather than impulsive buyers. ◊



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