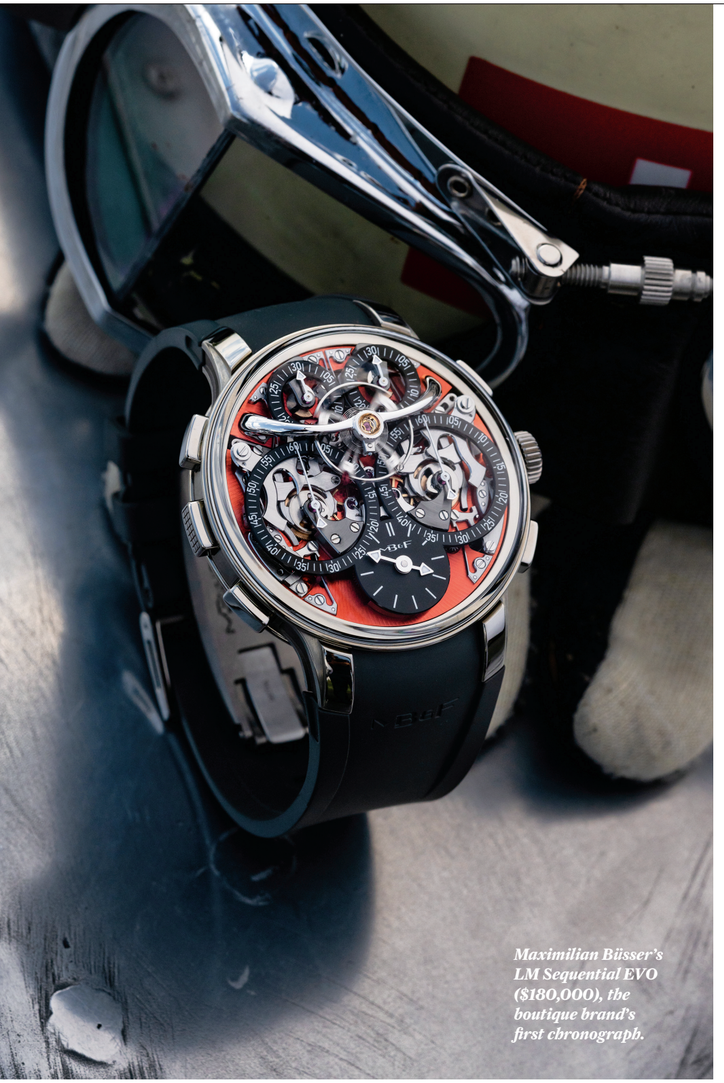
Value Propositions

The making of an elite watch involves more than meets the eye

By **LAURIE KAHLE**



Maximilian Büsser's LM Sequential EVO ($180,000), the boutique brand's first chronograph.

Like beauty, value is in the eye of the beholder, especially when it comes to fine watches, which can run into the high six figures and above depending on how complicated and well made they are. For the uninitiated, it's difficult to comprehend why and how a watch can be so expensive. But like anything handcrafted and painstakingly produced, the delight is in the details.

A watch movement is akin to an engine, with many moving parts working in perfect synchronicity. Developing a movement from scratch is particularly time-consuming and labor-intensive—and that's before the components are even hand-finished to perfection.

In the current disposable electronic age, mechanical watches are built to last and destined to become family heirlooms, provided they are well-maintained.

"The reality is that mechanical wristwatches in the digital age are something people are appreciating more for the craftsmanship," says David Hurley, president of Watches of Switzerland Group North America, who underscores the lasting value of fine watches as opposed to, say, his personal sneaker collection. "We know redundancy is built into almost everything we use today, so the fact that people can have these timepieces and wear them forever is really appreciated, and they are starting to better understand the research and development that goes into them."

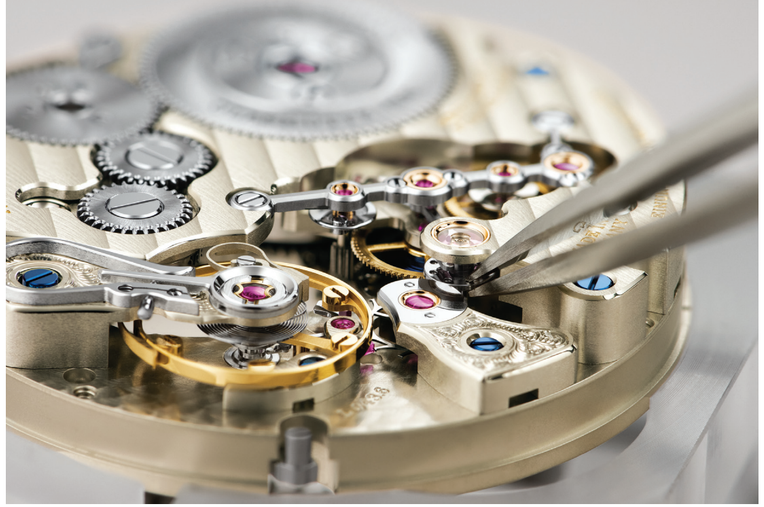
Anthony de Haas, director of product development at A. Lange & Söhne in Glashütte, Germany, which produces about 5,000 watches annually, points out that it takes years to develop even a simple movement, let alone a piece like Lange's Grand Complication, a $2.5 million masterpiece that was in the works for almost eight years.

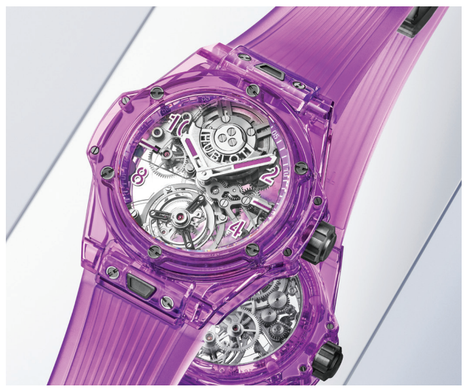
The process starts with an idea, then a briefing sets out the goals of a new project. "These guys sit behind computers using 3-D programs and build a whole movement from the ground up, and that takes time," de Haas says. "The task for the movement designers is not only to design and develop a movement that works, but one that is also aesthetically well balanced. It's like architecture, and they are artists."

Of course, what works on a computer screen does not always match reality, so there is a lot of trial and error—and time and labor—just to get through the prototype phase. Almost every single component of the movement has to be prototyped and produced. "Imagine what it costs to fabricate 600 to 700 parts—bridges, main plates, gears, levers, and springs," de Haas says. "We do everything in house, so it takes 16 to 18 months before you have parts on the watchmaker's table."

For small, independent brands like MB&F, with annual production in the low hundreds, the investment required to develop a movement is even more daunting. And yet, the company, which was founded in 2005 by Maximilian Büsser, recently completed its 20th caliber for the LM Sequential EVO ($180,000), the boutique brand's first chronograph. That milestone, however, wasn't achieved without a few brushes with bankruptcy over the years.

"The cash flow of a movement is insane," Büsser says, noting that until recently it could take four years to develop a movement, and an independent producer would be satisfied with a product lifespan of four years. "For four years, you are cash-flow negative, losing money. Then, when you get to the first year of production, you lose a ton more money. So, you have five years of negative cash flow followed by three years of positive cash flow. It's such a tightrope exercise."





Opposite page: Courtesy of MB&F; this page, from top: Courtesy of A. Lange & Söhne/© Lange Uhren GmbH; Courtesy of Hublot

Top: A. Lange & Söhne's manual-winding caliber L043.6 with 72 hours of power reserve. Bottom: Hublot's Big Bang Tourbillon Automatic Purple Sapphire.

Hublot CEO Ricardo Guadalupe says technology is what drives value, citing not only the development of innovative movements but also novel materials, such as the brand's Magic Gold, an alloy of 18-karat gold fused with ceramic to make it scratch-proof. The *manufacture* in Nyon, Switzerland, has its own metallurgy and materials laboratory, complete with a foundry, that works closely with the R&D department to produce revolutionary composites like ceramic and sapphire in unique colors.

"Through this technology and through the mechanics of the movement, we bring value to the watch," Guadalupe says. "For us, the movement is the soul of a mechanical watch, so we want to show it off, not cover it with a dial. That is why we work a lot in research and development of materials and movements."

This year's Big Bang Tourbillon Automatic Purple Sapphire 44mm ($200,000), along with last year's version in orange sapphire, exemplify those priorities with tinted sapphire cases that showcase the automatic tourbillon movement featuring a micro rotor on the dial side and three sapphire bridges. "That's really a fusion," Guadalupe says. "We came with a world first from the movement and materials point of view."

Like other brands in the upper echelon, A. Lange & Söhne takes a fanatical no-compromises approach when it comes to hand-finishing movement components, even those that aren't visible, and assembling the mechanisms.

Consider the process of beveling the edges and surface polishing a miniscule chronograph lever. Because finishers cannot actually hold the tiny pieces they are working on, specific tools often have to be made just for that purpose.

Beveling, also known as *anglage*, or chamfering, is one of the hallmarks of a finely finished watch. The process softens the hard edges of components by imparting a gentler 45-degree angle and polishing the beveled edge to make the movement more aesthetically pleasing.

Connoisseurs can immediately recognize anglage that has been done by hand versus machine, says de Haas, noting that a machine equipped with a diamond tool can scrape the material away and make the edge shine, but it's a "super-perfect hard edge" that cannot be achieved by hand, which lends a slightly rounded surface. Another badge of hand-finished quality is sharp, polished 45-degree inner angles on the bridges, a finishing technique that cannot be achieved with a machine.

For the first assembly at Lange, which does two, the goal is simply getting the movement to come alive and start ticking. Then it's off for testing, where a machine simulates wear for three days. Afterward, it goes back to the watchmaker, who disassembles everything, and the three-quarter mainplate gets finished with decorative striping.

After the movement is reassembled, another round of quality control follows with the movement running for six or seven days. "Like a motor, you need the gear trains to set," de Haas explains. "Then they do the final *réglage* [adjustment] before the final assembly with dial and hands. After, they case it up, and it runs again for a couple of days."

While specific processes vary by company, the obsession with hand-finishing and quality control is a common thread among the best of the best, which also invest heavily in high-tech equipment for designing movements and manufacturing movement components. Even more important is the human capital that imbues such elite watches with a sense of soul.

"Buying an A. Lange & Söhne timepiece means expressing certain values," says Wilhelm Schmid, the brand's CEO. "And by that, I don't necessarily mean monetary values. It's first and foremost the quest for perfection and search for uniqueness. And that is what connects the buyer of a watch with those who created it."