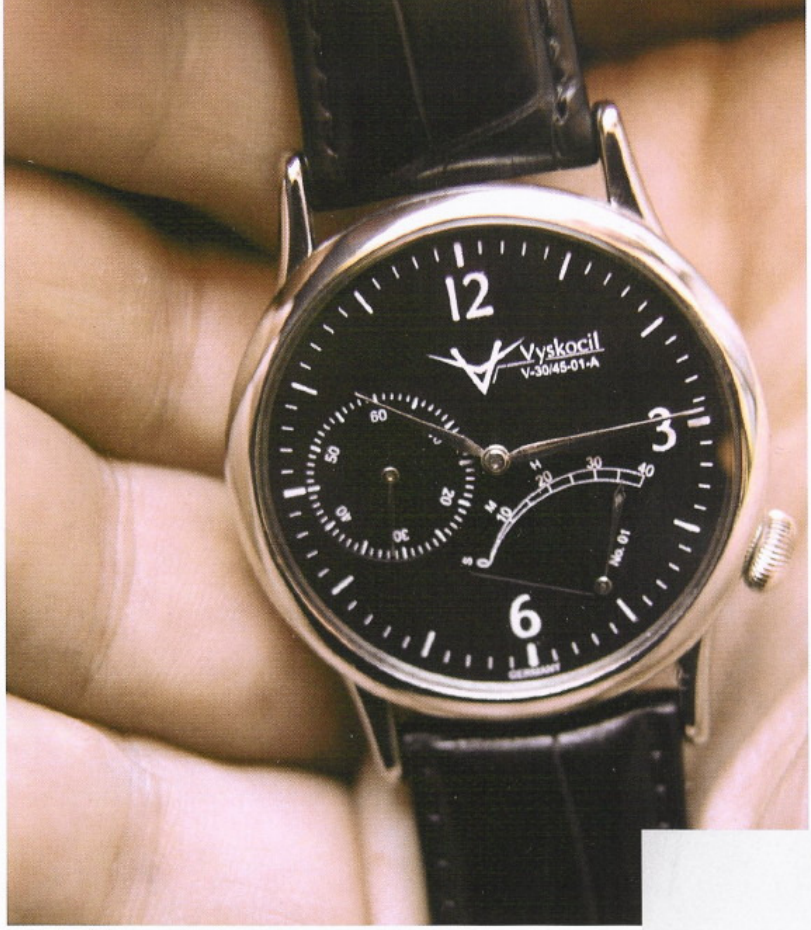
InSync MAGAZINE

Volume 9 No. 3
JAN/FEB 2006
USA $6.95
CANADA $9.95



VOLKER VYSKOCIL

"To give up a secure income for a jump into the unknown, I think that such a step can only be explained by a tremendous amount of passion."

The watchmaker and his first timepiece, Ref. V-30/45-01-A.

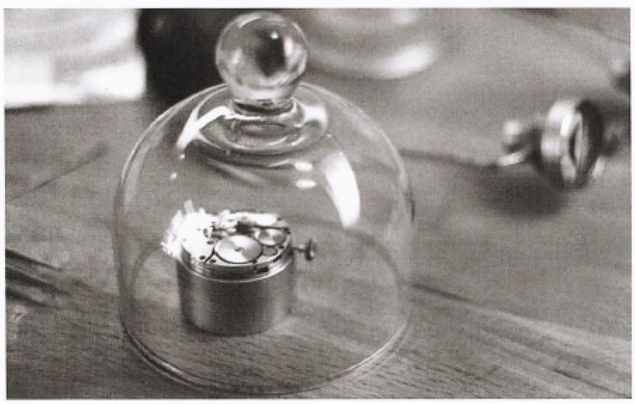
The above quote from Volker Vyskocil appears in the introduction to the brochure for his first watch, the V-30/45-01-A, more commonly known as the VA. With a decentralized seconds hand, power reserve indicator and crown at 4, the VA has already set many aficionados' hearts thumping with its elegant technical innovations while remaining an homage to old-world watchmaking.

The 41-year-old German was accepted as a member of the prestigious Horological Academy of Independent Watchmakers (AHCI) in 2005, based on construction of the VA, but refers to his beginnings as a "jump" because prior to founding his business approximately five years ago, he was a mechanical engineer. In fact, he has no formal horology training at all.

Vyskocil says that he was always interested in watchmaking, even when young, but when he turned 16, he was told that he would not be able to make a career of it because changing batteries was all there was to do. "The use of quartz technology was growing rapidly, and everyone said there was no future in traditional watchmaking," he says. It didn't help that he couldn't find a watchmaker to apprentice with either—the region where he lived, in the lower Rhine, lacked a watchmaking tradition.

So he looked for another trade to learn. He narrowed his choices down to three possibilities: toolmaking, precision mechanics or, curiously enough, armorer training. He chose toolmaking, but during his apprenticeship, he realized it wasn't quite for him. After the apprenticeship ended, he began studying mechanical engineering instead.

Yet all the while Vyskocil's career as an engineer progressed, he continued to tinker with watches. He was always on the lookout for watchmaking tools, watch parts and information about horology. He began



from above—The exterior of the building in Nettetal, Germany, which houses Vyskocil's workshop; the watchmaker at work in the well-lit room; a movement under glass.

collecting old and sometimes obscure watchmaking books and bought broken pocket watches that he could repair or completely rebuild. And the mentor with whom he longed to apprentice in his younger days finally appeared in one August Rehm. Rehm was an old watchmaker who had a small shop about 30 miles from Vyskocil's home. Rehm was also a strong believer in traditional methods and always had a steady supply of watches that needed repair. "We would talk about watches for hours," remembers Vyskocil. "He told me his secrets and offered his opinions about what made a good mechanical watch, about the most economical ways to repair a watch and the tendency of many watchmakers not to question existing mechanical solutions."

Solution is a word Vyskocil is fond of using, and for good cause, as his VA presents some unique answers to the age-old problems facing watch manufacturers. But before he could begin to envision this first watch, Vyskocil decided it was time to make the leap into full-time watchmaking by leaving his mechanical engineering job behind. He doesn't seem to regret that it took 20 years before he made horology his occupation. He says that, had he gotten a formal watchmaking education at an early age, his creations and outlook might be quite different today.

"My experience gave me a distance to look at watchmaking from outside the tradition without completely leaving it," he says. "My background in mechanical engineering helps me think analytically and calculate how to construct a timepiece. My toolmaking experience also helps me a lot, and I love to build small devices that can be used to make even smaller inventions."

But Vyskocil says that a true artisan needs more than just a great analytical mind and strong sense of calculation to make a lasting impression. Feeling, another of his often used words, is essential, he argues, because it gives a watch the correct, and in turn, beautiful proportion in nature's own eye.

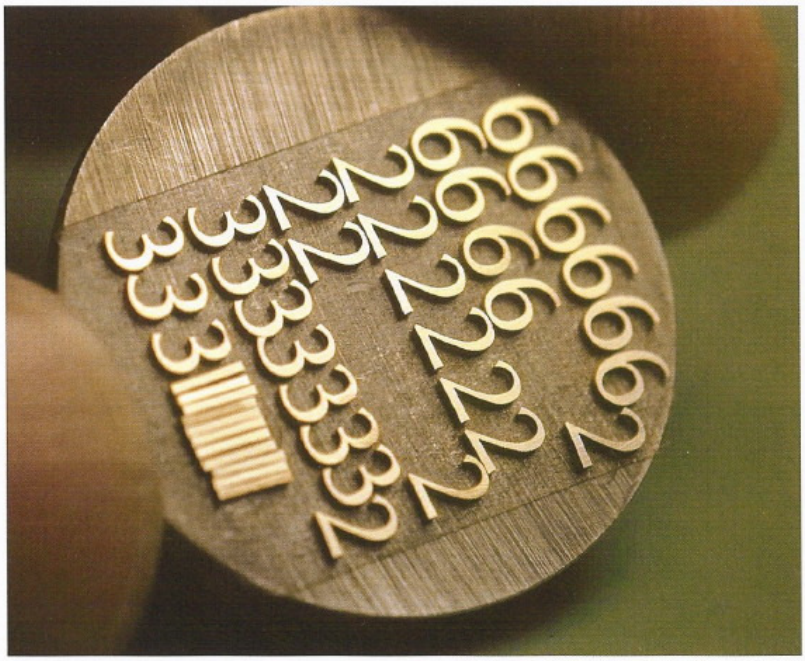
"To get this special feeling, I have closely studied all the old books about watchmaking I could find," he says. "I think you can adopt some of the spirit of the authors by doing that. And when you internalize this spirit, your

feeling will be more sure. The paradox is that although I calculate and analyze, I don't always have an answer as to why I constructed a movement or component the way I did. But I am aware I have made this information [from books] my own without truly realizing it. It comes from somewhere deep inside."

And his V-30/45-01-A clearly reflects his feelings and pure instinct for the art and science of watchmaking. First, the basics: V stands for Vyskocil; 30 refers to the movement's diameter in millimeters; 45 is the height of the movement in tenths of a millimeter; 01 refers to the version; A is the stage of development. This rather lengthy reference immediately reveals two things about Vyskocil: he likes detail, and perhaps presumably, he plans on making variations of this watch. Thus, if a fundamental improvement in the watch is made, it would be referred to as 02. Similarly, if an additional complication were added, B would replace A. As far as complications go, building an alarm function tops his list and may be seen in a future model.

Vyskocil's greatest challenge with the VA was to make it unique without disregarding the past. He compares this approach as walking a tightrope between tradition and innovation. He feels both concepts must be included, but neither favored. And it is clear that he has achieved his aims because the VA is truly a marriage of both the new and the old, both the studious and the inspired. Some could argue that the VA is a contradiction in this sense, but that is what makes it such a pleasant surprise. To borrow from Walt Whitman, the VA does indeed contain multitudes.

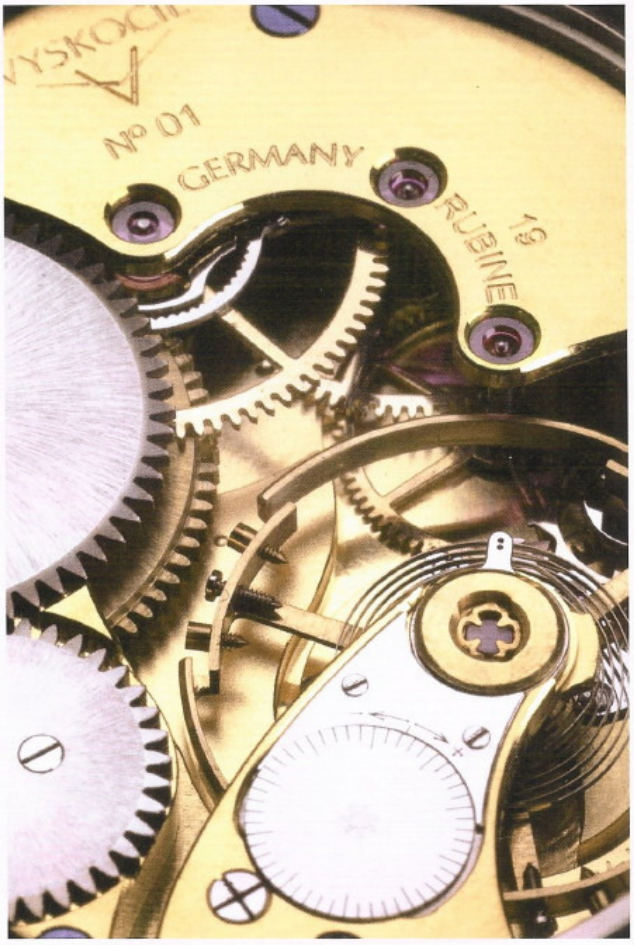
When he was developing his movement, Vyskocil was



from top—A collection of Arabic numerals destined for Vyskocil watch dials; tooling of a wheel; barrels ready for assembly. The maker manufactures nearly all of the parts that go into his watches.

struggling with "forgetting" everything he had learned. He relates how his girlfriend would thumb through watch journals and when she found an interesting watch, would ask if he could make something similar to it. He says he was pained because he had to explain to her that he could not look at other watches while he was constructing his own.

"My first drawings of the VA movement looked like a copy of the classic Glashütte plate movement," he says. "I was really not happy to notice this." He says it took him at least three months to shake off traditional thinking, which he managed by not looking at any other movements. "I tried to concentrate on only one question," he says,



Two completed wristwatches and a close-up of Vyskocil's proprietary movement.

"and that was how do I make a movement that gives a precision rate to a watch but still follows the old rules." Vyskocil uses "old rules" to mean the time before high-frequency balances were used in watches. With the invention of high-beat escapements, starting in the 1950s, watchmakers were able to build smaller and lighter balances. High-beat escapements had the same stabilizing effect as building a large, slow-beating balance. In addition, smaller balances allowed watchmakers to make the most of very limited space. But Vyskocil believes that the technologically superior solution doesn't always offer an equally aesthetic result. So he chose the old way: a big, heavy balance with 19,800 beats per hour and a mainspring barrel of nearly the same diameter. And though Vyskocil says he does not emulate anyone, he does acknowledge that the large balance pays homage to the only two men who have had a lasting impression on him in the world of horology: Abraham Louis Breguet, who needs no introduction, and George Daniels, the British horologist behind many innovations in use today, including the co-axial escapement, widely used in Omega watches.

The VA's large balance and mainspring also have had another consequence that has a lot of admirers purring: the unusual arrangement of the movement's wheels, which are in a non-circular layout. Those with a trained eye will also notice the lack of a central minutes wheel.

If that isn't enough to set the VA apart, hold on because there is plenty more to come. Notice the power reserve indicator at 5 on the dial. Above the 0-, 10- and 20-hour markings, sit the corresponding letters S, M and H. This is because the power reserve indicator serves a dual purpose. Aside from letting the wearer know how much energy remains in the mainspring barrel, the power reserve indicator also indicates the crown function when the crown is pulled out to set the time. The VA is designed to allow setting of the hours, minutes and seconds independently of one another. Contrast this with setting the time on most watches: when the crown is pulled out, the seconds hand stops, and the hour and minute hands are manipulated simultaneously. Advancing the hour hand one hour ahead also results in the minutes hand making a revolution around the dial. The burden is placed upon the wearer to remember exactly where the minute hand was resting prior to engaging the crown. With the VA, on the other hand, the hours (H) can be set in one hour increments, and sticklers for exact time need not worry about upsetting the minutes (M) and seconds (S) hands while doing so. This neat invention also allows for the position of the minutes hand to correspond exactly with the position of the seconds hand, so that if the seconds hand is at 40 seconds on the dial, the minutes hand will automatically be aligned exactly two-thirds of a minute away from the last minute marker. And this is all accomplished using a single crown. When the crown is pulled out, the power reserve function disengages. When it is pushed back fully into the case, the indicator again serves to remind the wearer whether or not the manual movement needs winding.

Meticulously organized tools and parts in Vyskocil's workshop.

The power reserve function also deserves notice because it has a clearly defined zero point. That is, the VA, with its 40 hours of power reserve, will stop ticking precisely when the power reserve needle points to 0 on the indicator. Most of today's watches with a power reserve function lack a clearly defined zero point and therefore are closer to estimates than exact indicators of when the mainspring barrel is out of energy. Vyskocil feels that this cheapens the whole concept of a power reserve function. "Older watches used to have a clearly defined zero point for a legitimate reason," he says. "They usually had to be wound once a day and preferably at the same time day after day so that they would always unwind under the same conditions. The power reserve indicated whether or not this was necessary so that overwinding, which would have disturbed the regular course of the watch, could be avoided."

The problem with the technology used for clearly defined zero-point power reserves in older watches, which was usually found in the setting, was that if it malfunctioned, the watch would stop completely. So today's watches tend to use friction couplings, which won't stop timekeeping if a malfunction occurs but do not allow for a wholly precise power reserve indication. The VA avoids both of these shortcomings by using a third approach—a seconds stop that engages after precisely 40 hours. This is accomplished through the use of a cam disc and finger lever which gauges the disc's position and then transmits the information through a gear segment to the power reserve. So after the cam disc has turned exactly 240 degrees, as it has been designed to do in the course of 40 hours, the finger lever activates a second lever, which prods the seconds stop.

All this innovation in such a clean-looking watch would never be guessed at by most. Vyskocil seems to like it that way. He tops it all off, throwing one's expectations a final curve ball, by adding a bit of the superfluous—a precision regulator. Most watches don't feature a precision regulator because modern timing machines make such a complication rudimentary. In addition, by Vyskocil's own admission, regulator curb pins are not necessarily accurate over time when trying to maintain a precise rate. He says the reason cannot be explained in any practical sense. "The precision regulator just brings a little soul to the piece and brings it back to an earlier time." It also adds to an already visually stunning movement.

Those who still aren't convinced of Vyskocil's immense talent should consider that the VA is completely made from scratch. The only parts he sources from existing movements are the escapement and hairspring. Everything else is made by hand, including the case, dial and hands. Even the VA's pearwood storage box is made by the man himself.

With individual attention like this, it is no wonder Vyskocil says he only makes approximately ten watches a year. Those hungering for one are best advised to get in line soon. "People ask if the VA is limited," he says. "My answer is always the same: yes, because my life is limited." ❖

Article by Ryan O'Leary. For information on Volker Vyskocil, telephone 49.21.57.81.19.03 or visit <www.vyskocil.de>. Vyskocil also maintains a popular website devoted to better understanding the mechanics of watches and clocks at <www.clockwatch.de>. Many of his illustrations are used by watchmaking schools around the globe.