

Glashütte, September 2012

The Moritz Grossmann manufacture

The art of crafting superb timepieces

The Grossmann manufacture is being re-established after more than 120 years

There is hardly another word in high-end watchmaking that is used as frequently as “manufacture” and seldom interpreted so disparately. A consensus exists in one respect: It comes from the Latin expression “manu factum” which means “made by hand”. This is a principle that is related to the watchmaking trade in the 19th century and now once again inspires the activities of the new Moritz Grossmann ateliers.

Connoisseurs of watchmaking can recognise Grossmann prowess in the typical details that characterise pocket watches from Glashütte: the straight cut of the plate covering two-thirds of the movement and showcases the balance in a semicircular cutout. The balance cock is not planar, but cantilevered as was the case in Grossmann’s chronometers. The visible screws that secure the gold chatons have raised pan heads, and the frequency of the balance is adjusted with a micrometer screw.

Eyes and hands are the measure of all things

The decisive factor is that these design features are manually executed by watchmakers in the quest for perfection and genuine artistry. The acuity of their eyes and the sensitivity of their hands are their assets. With these “tools”, the experts create value of an unprecedented degree. The edges of all movement parts are chamfered, then polished until they gleam, and the going-train wheels are pierced. The craftsmanship involved comes to the fore by the lavishly decorated parts. Three-band snailing embellishes the ratchet wheel. Ultra-thin hands, hardened to a brown-violet hue, reveal an almost obsolete skill. Hand engravings grace the escape-wheel and balance cocks. Additionally, the 2/3 plate is adorned with broad horizontal Glashütte ribbing.

All employees at the new Grossmann manufacture contribute their personal talents to the horological masterpiece that ultimately displays the historic “Moritz Grossmann Glashütte i/SA” signature. The idea is just the beginning, but to make it come to life requires the knowledge and experience of all specialists. The people behind Grossmann are totally committed to the tradition of craftsmanship, always seeking new approaches and inventive solutions. They promote and challenge each other to live up to their ambitious quest for perfection. These are the best prerequisites for the genesis of a remarkably exquisite timepiece.

The first rough sketches are hand-drawn

As has been the case for generations, the development of a new watch begins with a sketch. Historic principles and present-day expectations must be meaningfully combined. Technical feasibility and design need to be reconciled. To implement their ideas, calibre engineers use computer-aided 3D visualisation tools that allow them to apply and refine horological details.

The first prototype parts are made by hand in order to assess and examine the interaction of individual subassemblies. Before the first few timepieces can be crafted, the movement gradually takes shape in an ongoing dialogue between engineering and prototyping specialists. Using high-precision machine tools, electronically controlled machining centres, and wire-erosion systems, component blanks are produced to within a few thousandths of a millimetre of the specifications on the blueprints. Only in this phase does technology take precedence over manufacture.

The machined parts are first deburred and then painstakingly finished by expert hands that bevel edges, polish surfaces, and apply a diversity of decorative patterns. The manual transformation of a raw balance cock blank, for instance, into a functional and decorated component, takes about seven times longer than the production of the blank itself.

All parts must match

To fine-tune the interaction of all movement parts and mechanisms, the calibre is now assembled, oiled, and greased. Despite tight manufacturing tolerances, precision adjustments are still required. The rate-accuracy of the watch is regulated and checked on a motion simulator that performs typical wrist movements in various orientations. The test results determine whether further fine-tuning is required. As soon as they comply with the manufacture's strict quality requirements, the calibre is taken apart again. The mechanisms and parts are again cleaned, and the 2/3 plate is decorated with the signature Glashütte ribbing. Finally, the movement is assembled for the second time and only then the timepiece is endowed with its personality: the dial and the hands are mounted. The next step is to place the watch in its precious metal case. After a renewed rate-accuracy test that lasts at least 30 days, the watch is completed with a hand-stitched alligator strap and a butterfly clasp.

Grossmann's heritage

The horological excellence and the spirit of Moritz Grossmann are experiencing a comeback. The manufacture's watchmakers are preserving his tradition without copying historic timepieces. With innovation and craftsmanship, a combination of traditional and modern manufacturing methods, precious materials, they are creating watches that stand for a new HERITAGE IN TIME.