


THIN
MOVEMENTS




EXPANDING
COMPANY

The Minimatik
champagner from
the new neomatik
collection features
the thin DUW 3001
automatic caliber.

BY MICHAEL THOMPSON



Nearly all the parts for the new movement had to be inserted between the base and three-quarter plate—in a construction space of only one millimeter in height.



The NOMOS Swing System (left) features an escape wheel, pallet, spring and bridge, all made in-house.

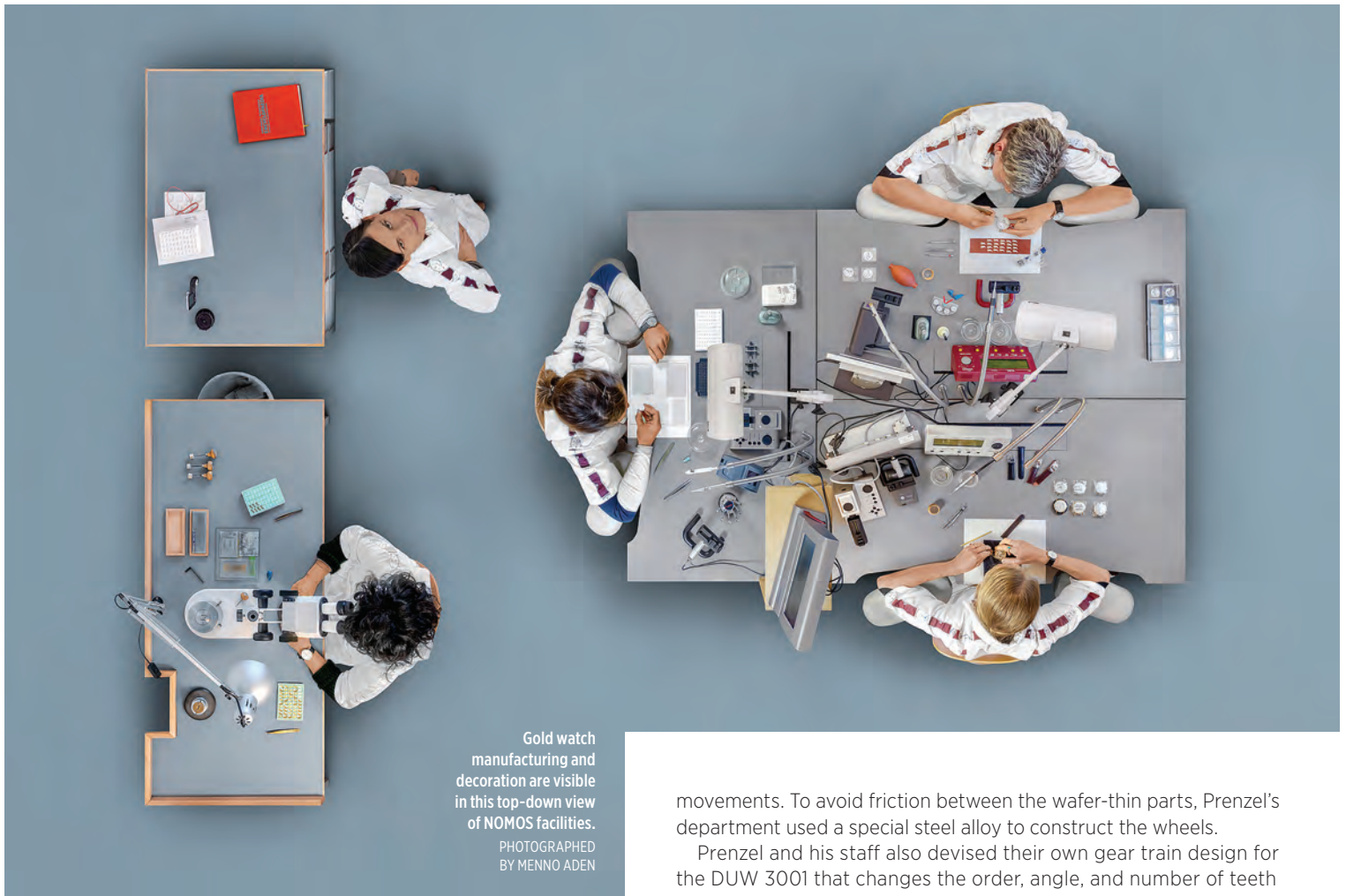
NOMOS GLASHÜTTE, the German-based maker of thin watches with minimalist designs, expanded its automatic watch collection this October by debuting the neomatik, ten new thin watches populating its four core models—Tangente, Orion, Metro and Ludwig—and which are also part of a new series called Minimatik.

The neomatik (which NOMOS spells with a small-case N) design comes in two versions: cyan blue accents on a white silver-plated dial, and neon orange on a champagne-colored dial, and all retain the firm's traditional 35mm or 36mm case sizes. Neomatik is the first automatic option within the firm's Orion collection, and neomatik expands automatic offerings within the other three existing models. The premier ten references in this 'neomatik 1st edition' collection

Nomos Glashütte's Neomatik
features the firm's
new thin automatic caliber.

will only be made through the end of 2015, according to NOMOS, which will make new references for Baselworld in 2016.

The neomatik champagne-dialed models, called neomatik champagner, are being offered with new German-sourced full-grain leather straps, while the white-dialed models feature Chicago-sourced black Horween Genuine Shell Cordovan, which NOMOS delivers with many of its watches. The NOMOS buckle clasp, which until now only graced the firm's gold watches, are newly designed in Berlin for NOMOS Glashütte and are hand-polished. Neomatik prices range between \$3,460 and \$3,960.



Gold watch manufacturing and decoration are visible in this top-down view of NOMOS facilities.

PHOTOGRAPHED BY MENNO ADEN

THE LAUNCH OF THE NEOMATIK models signals a shift in NOMOS production. Soon automatic watches should comprise the majority of production from NOMOS, which has been best known for its hand-wound watches. The neomatik series will complement the existing NOMOS automatic calibers first launched in 2005 with Epsilon, found inside the NOMOS collections Tangomat, Club Automat, Ludwig Automatik, Ahoi and Zürich.

THIN & SWING

INSIDE EACH of the new neomatik designs NOMOS Glashütte places the new automatic caliber, DUW 3001, which debuted earlier this year at Baselworld to great acclaim. At only 3.2 millimeters in height DUW 3001 is the firm's tenth in-house caliber and is thinner than almost any other existing automatic movement in widespread production. The movement is the result of three years of development, explains Theodor Prenzel, deputy director of the NOMOS research and development department, which also designed the firm's pace-setting in-house escapement called Swing System (see the sidebar for more about the NOMOS Swing System).

In addition to utilizing this Swing System, DUW 3001 features a balance bridge instead of a traditional balance cock, a design that contributes to its thinness while enhancing its shock resistance. The bridge also creates extra space for the rotor.

Prenzel adds that most of the DUW 3001's components are inserted between the base plate and the three-quarter plate, requiring a ratchet wheel made half as flat as those used in other automatic

movements. To avoid friction between the wafer-thin parts, Prenzel's department used a special steel alloy to construct the wheels.

Prenzel and his staff also devised their own gear train design for the DUW 3001 that changes the order, angle, and number of teeth to raise the efficiency of the gear train to 94.2 percent—considerably higher than the more typical eighty percent efficiency—according to NOMOS. On a recent tour of NOMOS Glashütte headquarters, *iW* watched as watchmakers hand-cut the teeth on each gear to NOMOS specifications.

“Until now, the rule in the world of fine watchmaking was: The smaller the caliber, the more inexact it is,” adds Prenzel. “Despite its very slender size, however, our movement is highly precise as we have halved the usual production tolerances.”

IN HOUSE

FOR THE PAST TWO YEARS all new NOMOS calibers produced bear the name “NOMOS Glashütte Deutsche Uhrenwerke,” which could be translated as “NOMOS Glashütte, German manufacturer of watch movements,” or DUW for short. This new name has underlined the company's credentials as a maker of its own calibers.

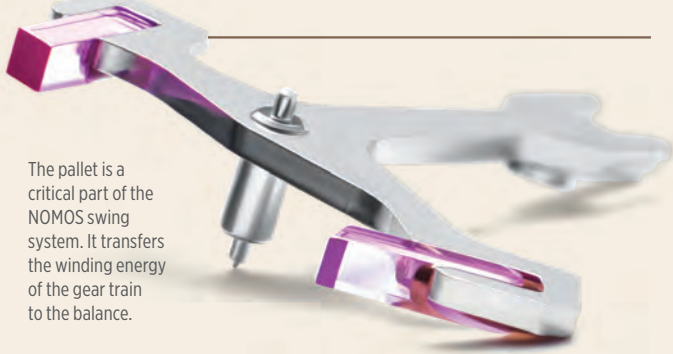
These credentials, along with expanded reach in the United States (where the firm currently distributes through forty retailers) and its popular Bauhaus-inspired design ethos created a successful combination. NOMOS Glashütte has hired twenty to thirty watchmakers and technicians in each of the past three years and now employs nearly 300 people, most of whom are based in Glashütte (though NOMOS operates a Berlin-based design and marketing office). In fact, NOMOS is planning to expand beyond its three buildings in Glashütte. It is now working on plans to build another production facility that will replace a parking lot across the street from its central location in what was originally the town's train station.

NOMOS Glashütte currently offers twelve model families:



NOMOS
GLASHÜTTE

MAKING THE SWING SYSTEM




The pallet is a critical part of the NOMOS swing system. It transfers the winding energy of the gear train to the balance.

NOMOS DEBUTED its Swing System escapement in last year's Metro collection. Its development was the result of seven years of research and considerable investment. Created in a partnership with the Dresden University of Technology, the NOMOS Swing System features an escape wheel, pallet, spring and bridge made in-house, utilizing an array of both automated and handcrafted operations performed entirely at the firm's multi-building headquarters in Glashütte.

I recently watched as NOMOS technicians carefully calibrated Swing System escape wheels made just a few feet away, preparing each one individually for assembly. This process is akin to balancing car tires. The technician, with mechanized assistance, carefully removes tiny amounts of metal from each wheel until it is perfectly in balance. Then the balance wheel is categorized so that it can be perfectly paired with a blued spring.

The company forges its own blued springs, cuts its own pallet bridges and even hand-glues each synthetic ruby pallet stone into place—a delicate operation. NOMOS technicians carefully heat up a tiny bit of varnish (a sticky shellac derived from insects), draw it into threads, dry it and then cut it into tiny pieces. When the pallet stone is ready to be attached to the pallet fork, the shellac is re-heated and used to attach the stone. The entire pallet is then re-calibrated before it is mounted into the gear train of each movement. Once it is coupled with its balance, each balance spring is again re-aligned under a microscope.

Utilized first in its Metro last year, NOMOS will soon make enough Swing Systems to allow it to produce the in-house escapement for all of the firm's ten in-house calibers.



NOMOS combines each component of its Swing System so that they complement each other perfectly.



The gold-cased Lux and Lambda collections feature high-end finishing, swan-neck fine adjustment, hand-polished gold chatons and a special hand-engraved balance cock.

“WE ARE A COMPANY WITH 100 PERCENT MOVEMENT MANUFACTURING, BUT OUR WATCHES ARE ALSO BEAUTIFUL, CLEAN, SOPHISTICATED AND RESTRAINED.”

Tangente, Tetra, Tangomat, Ahoi, Club, Ludwig, Zürich, Orion, Metro, Minimatik, Lux, and Lambda, in around eighty versions. Most, except for the karat gold Lambda models, are priced under \$4,500.

The gold Lux and Lambdas, introduced two years ago, are priced starting at \$18,500 and are limited by production. NOMOS Glashütte can make only one or two per week. These models—the only NOMOS models made in precious metal—are also the models with the most classically hand-finished movements. Each offers a long 84-hour power reserve and manual-wind movement with swan neck fine adjustment, rhodium-plated three-quarter plate, edges beveled and polished by hand, and fine sunbeam polishing. Their hand-polished gold chatons and balance complement a hand-engraved balance cock that reads “Mit Liebe in Glashütte gefertigt,” which means “lovingly produced in Glashütte.”

While its technical prowess and manufactured movements are powerful argument for many collectors, they are far from the only reasons enthusiasts have been flocking to the brand. NOMOS timepieces also offer a distinctive minimalistic design.

“Yes, we are a company with 100 percent movement manufacturing, but our watches are also beautiful, clean, sophisticated and restrained,” explains NOMOS Glashütte CEO Uwe Ahrendt. “In ten years time, these watches won’t be outdated.” 🍷