

Kees Engelbarts

New timepieces in mokume gane

BY ELIZABETH DOERR

Does a watch need to be masterminded by a watchmaker for it to be unique, special and sought after by collectors? Kees Engelbarts doesn't think so, and it is exactly this thinking outside of the box that represents such a special present in itself to the world of watches. A young Dutch engraver of exceptional talent living in Geneva, Engelbarts has embarked upon an adventure that few engravers have ever attempted: making and selling wristwatches under his own name.

Engelbarts' trademark design element is of course the mokume gane that he creates himself and engraves. Mokume gane is Japanese for "wood-eye metal," a descriptive term that reflects the metal's appearance of grained wood. The invention of the technique is generally attributed to Denbei Shoami, a seventeenth-century master metalsmith hailing from the Akita Prefecture of Northwest Japan who used the technique to strengthen and beautify samurai swords. By bonding two nonferrous metals with compatible properties of ductility and malleability, many different combinations are within the realm of possibility. The metals are fusion-layered (not soldered) and laminated, creating a new molecular between the layers and making them into one homogenous mass.





The pieces of mokume gane are soldered to the 18-karat gold cases in a special oven. It is important to control the temperature precisely to get a homogenous weld.



The wires on this case guarantee that the mokume gane does not move during the welding process.



Each piece of the mokume gane made from yellow, rose and white gold is unique, making every timepiece in the series peerless.



The patterns that appear like wood graining are topographical and cannot be predicted, although a certain desired pattern can be created by drilling holes into the metal before laminating. Ideally ten to twenty layers are used to produce a sheet of

mokume, laminated down to 0.8mm or less in thickness. The metal thus created is exceptionally labor intensive and each piece is inimitable.

Until now Engelbarts has made his exceptional pieces one at a time. Embarking upon something new,

he has recently created an original ten-piece series designated to be sold in two high-end retail shops in Tokyo: L'Ange Noir and L'Ange Rouge. The cases of 18-karat gold are handmade by Engelbarts and Jean-Pierre Scherrer on a lathe and



a milling machine. They are coated with mokume gane, consisting of yellow, rose and white gold, generated by Engelbarts. After laminating and decorating the sheets of mokume gane, Engelbarts cuts circles from them, which are then pressed between two brass plates to give them the same shape and angle as the case itself. The circular mokume gane plates are then soldered onto the case in a vacuum oven to avoid the unwanted effects of oxidation. The oven's heat must be controlled very precisely to achieve a homogeneous weld. After the mokume

gane is soldered onto the cases, they are retouched on the lathe, giving them their final dimensions. Once worked to its final state, the case is glass-blasted. This is a process that is quite similar to the common practice of sandblasting but is done with tiny balls of glass instead of sand. This lends the different gold colors within the mokume gane stronger contrasting hues.

Although the movements are not the special focus of Engelbarts' watches, they are never treated like poor stepsisters. In general, the talented Dutchman prefers to work

with Piguet mechanisms since they lend themselves especially well to the arts of skeletonizing and engraving. These particular movements are manually wound Piguet 21 calibers. They have been skeletonized, handengraved and finished with gold- and rhodium-plating by Kees Engelbarts himself. Engelbarts' brother, a watchmaker firmly ensconced in the Genevan horological scene, did the mechanical work on the series' prototype as well as the dragon timepieces *iW* previously reported upon (please see issue 74). The watchmaker duties for this ten-piece series were taken over by Kees Engelbarts' good friend Peter Speake-Marin, a fact that "speakes" volumes for the quality of the mechanics in addition to the extraordinary aesthetics of the timepieces.

An incredible amount of work goes into creating such a work of art by hand. Engelbarts began work on the ten-piece series in June 2003. He is scheduled to finish the last piece this April. He reports of the process: "Sketching and making the cases as well as discovering how to weld the mokume gane onto them was absolutely the hardest part. As usual, I did not count the hours needed to work on them, but I could easily say that one of these watches takes several weeks to make."

These extraordinary timepieces will be on sale at L'Ange Noir and L'Ange Rouge in Tokyo after Engelbarts completes the series and will retail for the equivalent of approximately 30,000 Swiss francs (about \$23,600). Parties interested in Engelbarts' work are invited to contact him personally to set up a visit to his workshop in Geneva. He can be contacted through his website at www.kees.ch. ☺