

## **Patek Philippe. A haven for rare artisanal skills**

Patek Philippe has always nurtured a penchant for rare and highly evolved handcrafts for decorating its exceptional timepieces and transforming them into coveted treasures. The precious one-of-a-kind objects created in the course of 174 years appealed not only to monarchs such as Queen Victoria of Great Britain and Ireland, Christian IX and Louise of Denmark, Queen Isabella II of Spain, King Oscar II of Norway and Sweden, Tsar Nicholas II of Russia, and Emperor Franz Joseph I of Austria, but also to Pope Pius IX as well as many other notables and dignitaries. Exquisite chiseling or relief engraving, cloisonné or champlevé enameling, gemsetting, and skeletonizing turned their timepieces into veritably regal works of art. All these techniques are rooted in the artisanal heritage of Geneva and contributed significantly to the global prestige enjoyed by watches made there. For a long time, these crafts and watchmaking artistry coexisted in a genuine symbiosis, establishing Geneva's eminence as a crucible of artisanal excellence and precision around the world. The reputation still reverberates today.

The metamorphoses of the 20th century – two World Wars, several revolutions, the emergence of the middle classes, mobilization expedited by railroads, automobiles, and aircraft – brought about a shift in interests and caused a gradual waning of the demand for certain artisanal skills that had evolved across many centuries, jeopardizing the survival of precious experience and know-how. Henri Stern (1910–2001), the former president of Patek Philippe and grandfather of the manufacture's current president Thierry Stern, had already recognized this decline in the 1940s and began to actively collect manifestations of these irreplaceable handcrafts. He continued to endorse the production of watches with lavish engravings and enamel decorations, even though he often had to wait years for a buyer or eventually ended up integrating the precious masterpieces into his own collection. It was clear to him that these artisanal talents would pass into oblivion unless regularly practiced. Then, in the 1950s, this passion for venerable Genevan traditions was discovered by his son Philippe, who in 1993 assumed the presidency and redoubled Patek Philippe's dedication to rare handcrafts in danger of becoming extinct. His son Thierry Stern, the manufacture's current president, has been just as enchanted by the fascination of these unique artisanal skills since his early childhood. Thus, for decades and across three generations so far, a singular collection has been in the making; since 2001, it has been publicly accessible in the Patek Philippe Museum in Geneva. With countless exhibits, it demonstrates the breathtaking creativity and prowess of true masters in these rare disciplines. All the while, more than forty timekeeping instruments crafted in Patek Philippe's workshops are elaborately decorated by the most talented virtuosos of the respective guilds.

## **RARE HANDCRAFT DISCIPLINES**

### **Engraving**

Burins, needles, chisels, and other sharp metal blades with wooden handles are among the tools used for engraving, probably the oldest technique with which timepieces have been embellished for hundreds of years. In the hands of an expert, engraving transforms the case of a pocket watch into a work of art with sharp contours and graceful reliefs that come alive as the light caresses them. The same tools are used to further adorn the delicate architecture of a skeletonized movement with elegant arabesques and volutes. The highly specialized discipline, which requires considerable artistic subtlety and dexterity, is mastered only by a small, elite community of doyens. Nearly two hundred engravers were registered in Geneva alone in 1789; meanwhile, their ranks have dwindled to perhaps a dozen. Patek Philippe's Ref. 6002 *Sky Moon Tourbillon* is a current masterpiece that exemplifies the art of relief and line engraving.



## Enameling

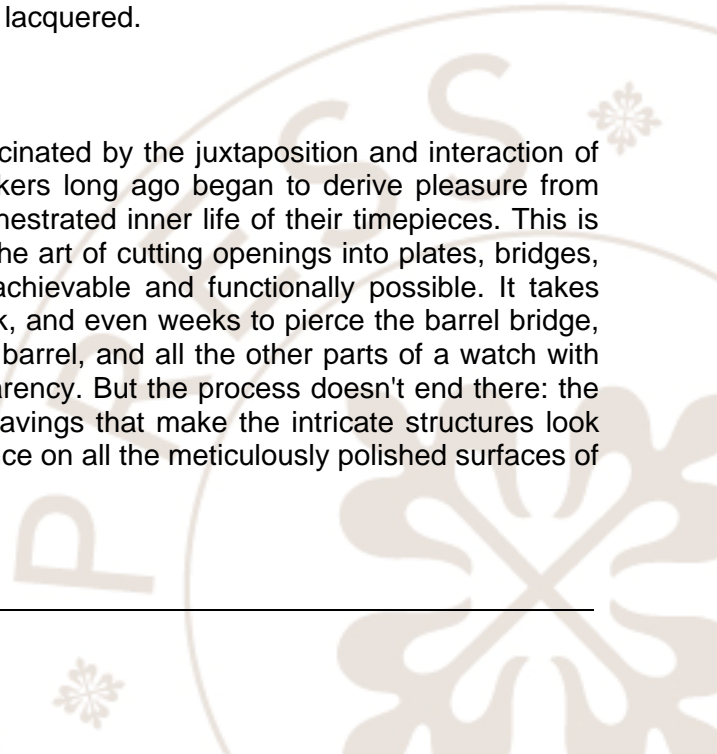
The term encompasses a broad palette of traditional techniques that are still actively supported by the Patek Philippe manufacture. The most complex one is miniature painting on enamel, a decidedly Genevan specialty with which the manufacture decorates a few pocket watches and wristwatch dials every year. Cloisonné enameling results in luminous and colorful decorations of an intensity resembling that of the richest stained glass. To create the motifs, the technique uses flattened gold wire with a thickness of 0.05 to 0.10 mm, soldered to the base metal on its edge. The individual compartments of the pattern are filled with enamel paints of various colors that are then consecutively melted and fused in an oven. Cloisonné enamel is reserved for one-of-a-kind pieces or very small series of dome table clocks, World Time watches with multicolored maps, and limited-edition wristwatches whose dials are graced with themed decorations. The completion of a single cloisonné enamel dial can take up to seven days, involve ten to thirty colors, and require as many as fifteen firing passes at 850°C. *Flinqué* is a further tradition nurtured by Patek Philippe. It is highly transparent enamel that is applied to guilloché metal surfaces to create glistening sunburst or undulated patterns. Additionally, some of the manufacture's watches in the current collection – simple and very classic as well as grand complication models – feature white or black enamel dials *à l'ancienne*.

## Marquetry – Inlaid Work

Tiny wood intarsias are assembled to fashion fantastic dials with incredibly rich details. Each piece is irreproducible and one-of-a-kind. The intricate technique requires profound experience and utmost dexterity. First, the artisan draws the motif true to scale and then makes twenty copies of the design. The paper is then cut along the individual contours of each element, from the largest to the very tiniest one. Subsequently, the woods are selected. As from a painter's palette, the artist can choose among 120 to 130 types of wood with distinctive colors and textures. Once the choices have been made, he assembles a number of veneer packages with about 10 layers of the same wood and cuts out the pattern elements with a precision-blade fretsaw. The next step is to pick the element, of the ten available identical ones, that most aesthetically matches the envisaged motif. Finally, he assembles the motif by putting the pieces together on the paper drawing like a puzzle. The upper side of the composition is glued to a sheet of paper. Then, the entire intarsia is secured to a backing layer and inserted in a platen press. The drying phase takes two to three days. The cover paper is then carefully sanded off, irregularities equalized, and the last imperfections eliminated. At this point, the last choice involves the finish: untreated, waxed, shellacked, or matt lacquered.

## Skeletonizing

Ever since the dawn of horology, people have been fascinated by the juxtaposition and interaction of tiny wheels, levers, and springs. Accordingly, watchmakers long ago began to derive pleasure from giving their customers insight into the circumspectly orchestrated inner life of their timepieces. This is the origin of the challenging discipline of skeletonizing, the art of cutting openings into plates, bridges, and cocks to the very limits of what is mechanically achievable and functionally possible. It takes countless hours to fully skeletonize just the balance cock, and even weeks to pierce the barrel bridge, the plate, the cover or even the base of the mainspring barrel, and all the other parts of a watch with the objective of achieving the ultimate degree of transparency. But the process doesn't end there: the parts are subsequently decorated with imaginative engravings that make the intricate structures look even more diaphanous and allow the incident light to dance on all the meticulously polished surfaces of





the components. Skeletonizing sets a captivating stage for the ballet performed by the rotating brass wheels.

### **Haute Joaillerie**

The fine art practiced by the most competent jewelers reflects centuries of experience, not least in the particularly elaborate gemsetting techniques mastered to perfection at Patek Philippe. The unique pieces created in the Geneva ateliers unite all the major precious stone setting methods such as bead, gridless pavé, and closed, as well as the extremely sophisticated invisible setting, which is considered to be the pinnacle of the jeweler's craft and entrusted only to the most accomplished specialists. This exclusive and very complicated technique requires a fine lateral groove to be cut on one facet of every stone. The groove lines up with tiny bosses worked into the jewelry item, allowing the stone to be secured in place within an accuracy of fractions of a millimeter. It is a gemsetting technique that calls for the ultimate in dexterity and an ultra-sharp eye. For each Patek Philippe Haute Joaillerie timepiece, the setting process alone requires between 250 and 350 hours of work. As treasured heirlooms and true masterpieces of artisanship, the creation of watches of this kind is the most beautiful way to safeguard the future of such traditions.

### **Baccarat Crystal Dome Table Clocks**

Patek Philippe's acclaimed dome clocks have been a part of the company's heritage for many decades as well, uniting several highly challenging handcraft disciplines such as cloisonné enamel. As a guardian of exceptional artisanal skills, the manufacture also pays tribute to the venerable craft of crystal glassmakers by partnering with the famous and distinguished Baccarat manufactory. It is known around the world for its stunning masterpieces in glass and the perfection of its traditional glassmaking methods. This alliance has yielded precious oeuvres featuring phenomenal designs in scintillating colors. The master glassmaker first blows the colored crystal to form the cylindrical body and the cupola of the clock. Then, the body is filled with colorless crystal, after which the ensemble is blown again and fused to obtain the totally homogeneous *cristal doublé*, the two-layer crystal shell. Now, the artisan manually engraves the motif with a grinding wheel, selectively exposing the transparent crystal beneath the colored layer again. For one single clock, this process requires over one hundred hours of concentrated work. Finally, the patterns are accented with gold fillings or platinum plating.

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