HARRY WINSTON



DEVELOPED WITH
CHRISTOPHE CLARET

Opus 4: a sensational movement in a reversible case.

Clever mechanicals...

The complexity of the Opus 4 is revealed by examining its movement. Two sets of hands move in a reverse motion: tourbillon and minute-repeater on one side, a large moon and the date on the other. The idea for such a mechanism, for all its technical difficulties, took shape quickly, at the start of talks between Harry Winston Rare Timepieces and Christophe Claret. The same applied to the choice of the round case from Harry Winston's *Premier* collection.

The Christophe Claret manufacturing workshops faced a daunting technical test: an outsize moon-phase indication and date on the back of a tourbillon, with two sets of counter-rotating hands and a repeater striking the hours, quarters and minutes.

Ringing in the emotions ...

An ordinary repeating gong goes around the movement once. The cathedral gong, so called because it sounds like a cathedral bell, circles the movement twice to achieve the special deep resonance that strikes a chord with horological enthusiasts.

The gongs are made of Swedish "Sandwik"-tempered stainless steel, traditionally chosen by watchmakers for its flexibility, strength and its excellent sound transmission. A steel rod is drawn and curved on a special tool and welded to blocks. Then the watchmaker works on it by hand taking care not to disturb the temper of the metal. Once the gong is made, it must be further fine tuned by filing. Filing can easily ruin the tone if it is done wrong — too much ruins the purity of sound. The technique needs years of practice and a steady hand, for mistakes are irreversible.

The pair of cathedral gongs produces a low note on the longer gong and a high one on the shorter. The watchmaker cuts the shorter gong, to tune it a third higher than the low note. The finished gongs are then arranged around the movement. When the repeater is activated, a

hammer for each gong strikes the hours on the low gong, the minutes on the high gong and the quarters (ding-dong) on both.

A gong that sounds right on the workbench needs a watchcase with good resonant properties. Watchmaker and casemaker thus pool their skills to achieve the perfect result. Christophe Claret combines craft experience with an excellent musical ear. He has the rare ability to hear whether a gong will sound right in the watchcase.

It is easy to see why such gongs have become rare today. They require skills that very few craftsmen possess, and access to closely guarded manufacturing techniques.

The manually wound movement has 423 parts, including 40 jewels – white sapphire instead of the usual ruby sapphire. Fully wound, it will run for 53 hours.

The case also has its secrets...

The round case is derived from the *Premier* model, which houses all the company's complicated movements. But it differs as the first reversible case made by Harry Winston. The owner of an Opus 4 can thus choose the face on display according to the mood and the moment.

Furthermore, at a diameter of 44mm, the case is unusually large for a Harry Winston model. This is to comply with the first law of chiming watches: the larger the case the better the sound.

The case is made in three parts with the caseband holding the movement and two bezels screwed on front and back. On the tourbillon side, the eight screws securing the bezel are exposed to give the face its technical look. On the side of the large moon display, the bezel is screwed on from underneath for a neater appearance.

The case provided a great challenge to accommodate the cathedral gongs. Bringing out their full tonality needed all the casemaker's experience and skills. Even if the gong has perfect pitch, its resonance depends on the internal structure of the watch. Because the movement is secured to the case, the entire case acts as a resonant sound box. The transmission of sound also depends on the frequency of the material, in this case, platinum. Although it's Harry Winston's favorite metal, platinum does not resonate as well as gold. To get the right frequency, the craftsman had to ensure the exact thickness of the case walls to a hundredth of a millimetre.

Unusual for a minute-repeater, the case is water-resistant. The repeater slide on the outside of the three-part case arms and activates the chiming mechanism inside. Sealing the slide meant the long and delicate task of soldering its components to properly insulate it.

Inventing a way of turning a watch...

The mechanism that turns Opus 4 over to display one of its two faces is unlike any other used in watchmaking. The lugs are mobile and fixed to a swivel in the arches. To turn the case the lugs have to be disconnected by pulling them apart. The watch does not turn on a chassis but is worn directly on the wrist. Either face can be displayed according to the time of day or the whim of the owner.

The finish that you would expect...

On the tourbillon face, the hours and minute-markers are engraved on a chapter ring surrounding the movement. On the moon side, the hours and minutes ring also carries the dates. The dial plate with lunar terminators has been hollowed out and painted. The moon-disc, in 18-carat white gold, is hand-engraved and painted. The case is polished save for a satined strip on the sides.

Because a watch of this complexity has to be rare, the Opus 4 series is limited to 18 watches plus two jewellery pieces, each of which is unique. The jewellery watches presented the difficulty of setting baguette and princess-cut diamonds with the visible screws on the tourbillon face. The moon dial catches fire in a breathtaking display of diamonds.



Technical specifications

Movement: Manually wound tourbillon, repeating on the hours, quarters and minutes on

cathedral gongs. Time indications on both sides. Large moon-phase display

and date. 53-hour power reserve. 18,000v/h balance frequency.

Time indications on back-to-back dials with reversed hands.

Case turning on the lugs.

Two pushpieces to set the date and the moon.

Functions: Front: Hours and minutes. Tourbillon and minute-repeater with cathedral

gongs.

Back: Hours and minutes. Large moon display and date.

Cases: 44mm diameter in 950 platinum (18 pieces). Two unique pieces in 950 plat-

inum set with baguette or princess-cut diamonds.

Crystals: Sapphire-crystal glasses with anti-reflective coating.

Faces: Front: Open-work revealing the movement. Engraved gold chapter-ring.

Back: hand-engraved moon disk in 18-carat white gold with painted lunar

terminators and engraved gold chapter-ring.

Strap: Hand-stitched crocodile with a buckle in 950 platinum.

Water-

<u>resistance</u>: 30 metres (3 ATM)