

INTERNATIONAL WATCH

REPRINTED FROM APRIL 2006



[www.iwmagazine.com](http://www.iwmagazine.com)



# URWERK

THE FUTURE IS NOW

---

# Black Beauty

URWERK DARKENS ITS  
FUTURISTIC STEALTH  
DESIGN WITH A PLASMA-  
ENHANCED COATING



The men behind the watches. Watchmaker Felix Baumgartner (left) discusses details with designer Martin Frei.

*'If it ain't broke, don't fix it'*. That maxim often makes sense in wristwatch design. With demand far outstripping production, URWERK's targa-topped 103.03 certainly does not need fixing. So what do you do when you have an incredibly successful watch yet wish to extend the design boundaries further still?

The answer that URWERK's designer Martin Frei and watchmaker Felix Baumgartner came up with was two-pronged: They used a unique coating over platinum and also crafted a platinum-cased limited edition. Since platinum is often considered the king of the royal metals, URWERK gave its designs the royal treatment.



URWERK's new 103 Blackbird



103.03 in rose gold

**Bottom:** One inside corner highlights the extreme complexity of the case.

Taking advantage of an opportunity to use a superior metal coating technology, URWERK realized a long-standing dream to create a new look for the 103: the jet-black 103 Blackbird. What's more, the revealing side windows on the new 103.05 place even more of URWERK's innovative satellite complication on display.

#### The Blackbird

URWERK has long harbored a burning passion to create an exceptional black watch. The streamlined case is cloaked in an exotic black PE-CVD coat rather than the more common PVD, all crafted from a solid block of precious platinum.

A PE-CVD, or Plasma Enhanced-Chemical Vapor Deposition, applied

coat has a higher scratch resistance than PVD and is much harder due to its amorphous, hydrogenated carbon structure.

In creating the Blackbird, URWERK is one of the first—if not the very first—watch companies to take advantage of this technique.

URWERK's intricate case shape is already incredibly difficult

to machine in gold and harder still in much denser platinum. In fact, one of the fundamental questions was whether such a complex case design could even be crafted in platinum.

Many, many months of painstaking work by one of the industry's finest case makers finally resulted in a resounding yes. →



### Stealth look

In keeping with the pure, minimalist, stealth look of the watch, URWERK dispensed with the usual crenellations on top of the case to give it a smooth, high-gloss finish. The look is evocative of Lockheed's first stealth jet, the SR-71, aka Blackbird. However, don't expect

any of the very few fortunate owners of this Blackbird to be trying to avoid detection.

An exquisite palladium outline following the perimeter of the targa crystal accentuates the dramatic visual impact of the glass against the gloss-black case. Developing the technique to apply the palla-

dium outline in a fine regular width around the curvaceous circumference was a challenge in itself.

That is the good news. Now for the bad: the 103 Blackbird is available in an extremely limited edition of only ten pieces. The chances of buying one—or even seeing one in the flesh for that matter—are quite



The platinum limited edition 103.05



One of the 103.05's revealing side windows

slight, another quality this model shares with its namesake.

#### Platinum 103.05

If you have missed your chance with the 103 Blackbird then you may have slightly better luck with the beautiful 103.05. In this platinum, limited-edition model there are all of fifty pieces available.

With the new 103.05, URWERK takes the concept of displaying the orbiting satellite complication to new heights. The ethereal targa crystal is further enhanced by the addition of a revealing elliptical window each side of the streamlined body.

URWERK opened up much of the orbital cross and satellite system to view when it added the targa-shaped crystal on the 103.03. Not only do the revolving hour satellites tell us the time, when viewed through the larger crystal they also allow us to see time approaching and receding. Another benefit is that the large transparent crystal esthetically lightens the whole structure.

Continuing to explore this lightening effect even further, designer

Frei takes it to a higher level in this latest version of URWERK's watch. Frei has outlined the celestial targa crystal with fine palladium. He traces the perimeter to accentuate the sensuous glass. He has added two ovoidal portholes. These not only let more light in on the perambulating planets inside, they allow us to sneak a peak at the orbiting satel-

lites from a completely new angle.

This striking modification is the result of considerable research and development.

The three windows lay bare the 103.05's high-tech complication and materials with black PVD-coated grade two titanium for both the hour satellites and orbital cross. Turning the watch over reveals the



URWERK'S unique Control Board

## Machining Platinum Cases

**To fully appreciate these watches,** it is worth having a closer look at the sheer difficulty in fabricating their intricate platinum cases. While modern CNC machining does allow for speed, precision and complexity unknown not that long ago, it is not magic. The machine has to be programmed to know which cutting-tool to use, when, where and at what speed. That is an incredibly highly skilled profession in itself.

Bear in mind that the precision and tolerances the CNC machine is capable of mean nothing if the case is not accurately positioned. The machine must be regulated and very thoroughly checked after each and every change of case position, plus every time a tool is replaced, to avoid ruining the case. This takes a great deal of time.

To understand just what is involved in the manufacture of a URWERK watch case, compare the following figures I obtained from the CNC programmer responsible for creating them.

To make a fairly simple round watch case in steel or gold involves the following: eight hours to program the machine; four hours to regulate/adjust the tools; thirty minutes to actually make the case, using up to five standard tools and two case position changes (front and back). Two hundred cases can be made before needing to replace tools.

To make a gold cased 103.03 takes approximately three full weeks to program the machine; one full week to regulate/adjust the tools; seven hours to actually make the case; fifteen standard tools and four special tools; six case position changes and fifty cases made before needing to replace tools.

To make a platinum case 103.05 takes approximately four and a half weeks to program the machine; three full weeks to regulate/adjust the tools; over two days to actually make the case; fifteen standard tools and eight special tools; six case position changes; and five cases made before needing to replace tools.

And the difficulty of working with URWERK's platinum case does not terminate with the machining. Compared to gold, it then takes twice as long to finish and polish the much denser platinum case.



The bright yellow SuperLumiNova glows ice-blue at night.

secrets of the grade five titanium control board.

While the side windows make the 103.05 instantly recognizable, the watch also features a less conspicuous distinguishing feature from the 103.03: wider and squarer crenellations on both the top of the case and the crown.

### Shared characteristics

Both watches feature an arc of natural metal perlage tracing the curve of the minute chapter. A bolder characteristic these two share is the strong esthetical statement that the bright yellow SuperLumiNova markers make by day. An ice-blue glow is seen from this special SuperLumiNova at night and is reminiscent of the instrumentation in a jet's cockpit.

It was only twelve months ago that URWERK presented the 103.03 and the ground breaking Opus 5 for Harry Winston Rare Timepieces. We would have forgiven them for coming back down to earth and taking it a little easy for a while. But instead, URWERK has kept its head in the stars. The 103.05 platinum limited edition of fifty pieces retails for \$88,000, while the Blackbird platinum is made in a limited edition of ten pieces retailing for \$108,000. ☺

**Urwerk USA**

9595 Wilshire Boulevard; Suite 511

Beverly Hills, CA 90212

T 310.205.5555

F 310.279.1000

[www.urwerk.ch](http://www.urwerk.ch)