

François Quentin and the Fashionlab by Dassault Systèmes highlight the outstanding mechanism of the 4N through a unique photo-realistic 3D experience at BaselWorld 2015

The technology incubator and the designer magnify the 4N by developing a new Sapphire case with Dassault Systèmes 3D Design software and NVIDIA Quadro VCA

As part of its incubation programs, the FashionLab - Dassault Systèmes innovation laboratory dedicated to luxury - has renewed its collaboration with the well-known designer François Quentin for his 4N Brand to introduce a new 3D experience during the next BaselWorld 2015.

A new Sapphire case: transparency to reveal the movement



This season, the designer François Quentin wanted to reveal a new design of the MTV 4N-01 watch with a new Sapphire case. The product concept was to enhance the movement of this exceptional timepiece with transparency.

"I wanted to create a new Sapphire case to magnify the three-dimensional movement of the watch. The idea was to highlight the mechanism. Transparency was the key of this new project", explains François Quentin.

François Quentin then worked closely with the FashionLab to develop this new model, thanks to Dassault Systèmes 3D design software. The aim was not only to manage this new material and its impact on visual effects, but also to calculate the impact generated on the case shape.

A design evolution

The project went through two stages: a first step dedicated to the new case design in 3D, based on the new material (Sapphire) and its impact on the overall shape of the case. François Quentin used the Dassault Systèmes 3DEXPERIENCE platform on the Cloud to imagine, design and build this new version of the watch. The offer "My Product Portfolio on Cloud" enabled him a fast deployment and a fully integrated 3D digital continuity to cover all stages of development of the watch.



3D display of unparalleled photo quality



The second step was to simulate the desired transparency as accurately as possible. For that, the FashionLab and François Quentin worked with NVIDIA, the leader in visual computing, to improve rendering performance and achieve the highest visual fidelity.

The sapphire is almost as complex as diamond. It was essential to digitally replicate the design before we invested in manufacturing it. It was an added challenge because modeling 3D transparency brings with it huge calculation complexity that typically requires hundreds of hours of image processing," said François Quentin."

FashionLab and NVIDIA worked with François Quentin to deploy the NVIDIA Quadro Visual Computing Appliance (VCA), a GPU rendering appliance that dramatically accelerates the work of NVIDIA Iray, a photorealistic renderer integrated into Dassault Systèmes' CATIA. This enabled the designers to interact and view the computer models seamlessly at an incredibly high visual fidelity from all angles, as if it were a 3D physical prototype.

Realistic Photo rendering deported:

Thierry Rouf, 3D Expert at the FashionLab by Dassault Systèmes explains: "We've installed the Quadro VCA in our datacenter near Paris. During BaselWorld, we'll demonstrate how we access through a simple Internet connection to remotely and dynamically view, with photorealistic quality, all components of this new watch."

Discover the new 4N at BaselWorld

This new Sapphire box will be presented during the BaselWorld 2015 through a physical prototype and a 3D large-framed photo realist in real time.

4N will be exhibited at the Ramada Plaza hotel, on the top floor, from 18 to 26 March 2015.

About the FashionLab by Dassault Systèmes



FashionLab is Dassault Systèmes **technology incubator** dedicated to designers. FashionLab is at the crossroads of the luxury world and the virtual world of 3D, marrying the engineering creativity of Dassault Systèmes with the artistic inventiveness and industry know-how. It aims at giving rise to new 3D Experiences for luxury, fashion, watch-making companies, which will integrate design tools, simulation tools and collaborative platform required to create an entire collection.

About François Quentin



François created the 4N watch brand in 2009. As an independent designer since 1986, he has designed several contemporary models for Swiss and French watchmakers. Now 47, he has amassed a wide range of design skills. With an avid interest in both mechanics and computers, he is a designer working in business sectors requiring skills that are at once diverse and specific, from machine tooling to mechanical optics to web design. It is now safe to say that François Quentin is full-fledged specialist in watch design.

About 4N



A simple digital display powered by a mechanical movement. This was the idea behind the creation of the 4N: to go beyond typical analog mechanical timepieces with moving hands. The brand draws its name from the four digits found on the digital “face” of the watch, indicating the time. 4N = 4 numbers. Not merely telling the time, but actually revealing it by the use of its unique 4-digit display, the watch relays time’s rhythmic movement.

Resolutely masculine, and unapologetically high-Tech, the 4N houses a complex mechanism, which becomes easily understandable thanks to its legibility. 4N has mastered time with a modern concept housing a mechanical heart – looking forward while still paying homage to the time – honored basics of watch making.

About NVIDIA:



NVIDIA’s work in visual computing — the art and science of computer graphics — has led to thousands of patented inventions, breakthrough technologies, deep industry relationships and a globally recognized brand. For two decades, we’ve pioneered this uniquely powerful medium, which has transformed the PC from a tool for productivity into one for creativity and discovery.

Partner:

