DEFY INVENTOR

DISRUPTIVE TECHNOLOGY

With its new disruptive "Zenith Oscillator" control system, the brand with the guiding star is revolutionising mechanical watchmaking. High frequency, chronometric precision, reliability and stability: the oscillator developed and patented by the Manufacture replaces the traditional sprung balance used for more than three centuries! Featuring a single element (compared with 30 or so components of a standard regulating organ), this high-tech device equips the new DEFY Inventor. A case made of lightweight titanium and Aeronith – an innovative aluminium-polymer composite – teamed with an architectural design: through the DEFY Inventor, Zenith is (re)inventing the watchmaking of tomorrow, in an entirely independent manner.

Taking on the future

Zenith announced right from the start that DEFY would write new chapters in its history. This contemporary, even futuristic saga – given that the brand's visionary gaze remains firmly fixed on the horizon – began in 2017 with the remarkable 100th of a second chronograph named DEFY El Primero 21. The same year, Zenith unveiled DEFY Lab, an 'archetype' regulated by a revolutionary oscillator developed by the Manufacture and issued in a 10-piece limited edition. Today, the 'specimen' is moving beyond laboratory stage and becoming the DEFY Inventor, produced in a run of several hundred units and equipped with its own patented regulating organ. Like its predecessor, DEFY Inventor offers superlative technical performance and a modern aesthetic composed of cutting-edge materials.This avant-garde three-hand watch is now series-produced – an industrial tour de force – and stylised to appeal to urban aesthetes. A brief reminder of its outstanding assets.

Zenith Oscillator

Beating at the extremely high frequency of 18 Hz (compared to the usual 4 Hz usually) and endowed with a comfortable two-day autonomy, Defy Inventor owes its exceptional properties to a disruptive technology: the single-piece Zenith Oscillator developed and patented by the Maison. A strategic component that constitutes the ultimate achievement of an independent Manufacture capable of developing and producing a mechanical movement in its entirety, including its own regulating system! The result of an unprecedented scientific approach to the quest for performance, it has replaced the sprung balance used in mechanical watchmaking for three and a half centuries. This major innovation for the industry – a unique ultra-thin element (0.5 mm) made of monocrystalline silicon that replaces the 30 or so components of a standard regulating organ – offers a number of benefits including increased reliability. Doubtless most importantly of all, the new even more high-tech version of the ZENITH oscillator operates at the slightly higher frequency of 18 Hz (129,600 vph), while the new escape wheel with flexible teeth improves security and ensures more efficient energy transfer.

Urban legend

An innovative 'engine' has been teamed with an avant-garde exterior. DEFY Inventor is as architectural as it is organic. Like an animated being in a state of perpetual motion, its heart of a new genre pulsates on the dial side, beneath a sophisticated openworked construction. Its powerful stature is carved out from ultra-light materials: brushed titanium for the 44 mm diameter case, Aeronith for the textured bezel. This lightest aluminium composite in the world was developed using an exclusive high-tech process. Three times lighter than titanium, made of open-pore aluminium foam, stiffened with a polymer, Aeronith is easily forgotten when worn, while asserting a unique modern style. The equally airy openworked dial forms a stylised propeller, of which the five 'blades/branches' evoke the Zenith star. Broad hours and minutes hands sweep over the mechanism, while a

slender star-tipped central sweep-seconds hand – equipped with a stop-seconds system enabling ultra-accurate adjustment – marks off the seconds. In an ultimate touch of futuristic sophistication, the iconic DEFY Inventor is secured to the wrist by a black rubber strap with a midnight blue "Cordura effect" strap.

ZENITH: the future of Swiss watchmaking

Since 1865, Zenith has been guided by authenticity, daring and passion in pushing the boundaries of excellence, precision and innovation. Soon after its founding in le Locle by visionary watchmaker Georges Favre-Jacot, Zenith gained recognition for the precision of its chronometers, which it has won 2,333 chronometry prizes in just over a century and a half of existence: an absolute record. Famed for its legendary 1969 El Primero calibre enabling short-time measurement accurate to the nearest 1/10th of a second, Zenith has since developed over 600 movement variations. Today, Zenith offers new and fascinating vistas, including 1/100th of a second timing with the Defy El Primero 21. Energised by newly reinforced ties with a proud tradition of dynamic, avant-garde thinking, Zenith is writing its future… and the future of Swiss watchmaking.

PRESS ROOM

For additional pictures please access the below link
http://pressroom.zenith-watches.com/login/?redirect_to=%2F&reauth=1

DEFY INVENTOR

TECHNICAL DETAILS

Reference: 95.9001.9100/78.R920

KEY POINTS

Monolithic regulating organ made of Silicon (compared with 30 or so components of a standard regulating organ)
Bezel made of Aeronith (the lightest aluminium composite in the world)
High frequency of 18Hz (129'600 VpH)
No need for lubrification

MOVEMENT

Calibre 9100
Calibre: 14 ¼ ``` (Diameter: 32.80mm)
Movement thickness: 8.13 mm
Components: 148
Jewels: 18
Frequency: 129'600 VpH (18 Hz)
Power-reserve: min. 48 hours
Finishing: Oscillating weight adorned with "Côtes de Genève" motif

FUNCTIONS

Hours, minutes and central seconds
(stop second mechanism)

CASE, DIAL & HANDS

Diameter: 44 mm
Diameter opening: 35.5mm
Thickness: 14.5mm
Crystal: Domed sapphire crystal with anti-reflective treatment on both sides
Case-back: Transparent sapphire crystal
Material: Brushed titanium with Aeronith bezel
Water-resistance: 5 ATM
Dial: Blue Openworked
Hour-markers: Rhodium-plated, faceted and coated with Super-LumiNova® SLN C1
Hands: Rhodium-plated, faceted and coated with Super-LumiNova® SLN C1

STRAP & BUCKLE

Black rubber with blue "Cordura effect" strap
Titanium double folding clasp

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