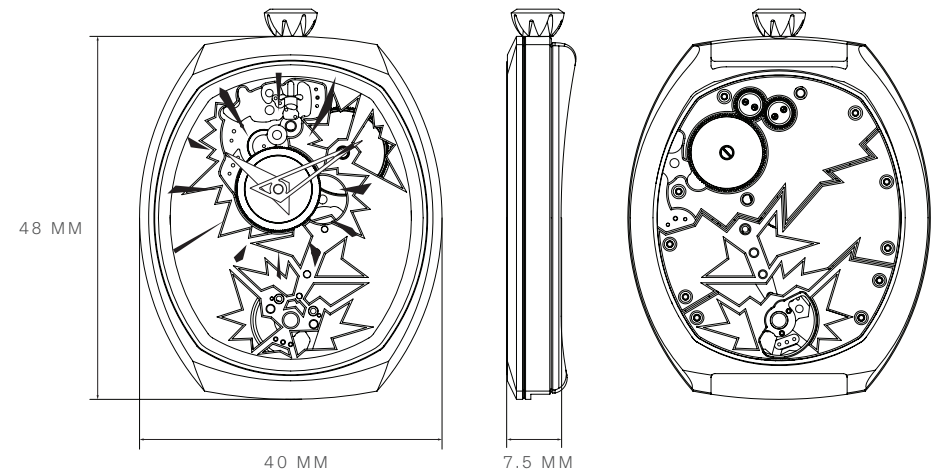


## Mechanical Entropy (black & rhodium movement)

Model	Mechanical Entropy
Case material & colour	Titanium with brushed and polished finishing & black PVD inner ring
Case size	48 × 40 mm (length × width), 7.5mm thick
Glass	Sapphire with exploding metal hour markers
Colour of dial & style	No dial
Hands	Polished hands with white lacquer details
Movement	<p>Mechanical Manual movement, CHAOS I, developed with Agenhor.</p> <p>Manual wind movement with 50 hours power reserve, 3.2mm thick.</p> <p>Two-tone finishing: black satin finish with Rhodium-plated exploding openings.</p> <p>Hand-finished components, including engraved and hand-painted exploding barrel and shattering skeletonised hour wheel.</p> <p>Patented AgenPit regulator.</p>
Buckle	Titanium pin buckle
Bracelet	Hand-stitched technical fabric







## About Mechanical Entropy

MECHANICAL ENTROPY is the first piece from Fiona Krüger's second collection of timepieces – the Chaos collection.

Fiona combined the seemingly contradictory notions of order and perfection associated with fine watchmaking versus disorder and chaos, which describe the passing of time according to the laws of physics. These contrasting but related ideas were the basis around the creation of her designs and the development of the brand's first exclusive calibre: Chaos I.

Mechanical Entropy highlights the beauty of the mechanical movement: a minimalistic case with generous front and back openings and no dial means the whole of the graphic movement is on show. The movement itself is not fully skeletonised; the openings were drawn as explosions to highlight specific components, the look and position of each component carefully considered in order to create this 3-dimensional mechanical drawing: a snapshot of the passing of time.

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#### THE MOVEMENT:

The gear train stretches out the length of the mechanism, displaying each wheel on the path towards the erupting balance wheel. The shattered hour and minute wheels have been pushed off-center and the bursting barrel of the mainspring is visible through the exploding main plate and bridges in the top right of the movement. As you wind up your watch the barrel turns, animating the eruption. Each distinctive section of the beautifully finished movement is delicately framed by various size explosions, building up in layers from the movement's bridges to the main-plate. The plates and bridges of the two-tone movement have a brushed finish with a black PVD coating, while the openings and the larger surface explosion on the front of the movement were created with laser technology and a galvanic colouring process in either gold or rhodium.

#### HANDS AND INDICES:

Polished shard hour and minute hands hover above the movement: a large white lacquer hand indicates the hours, and a skeletonized hand with lacquer detail indicates the minutes. Metallic fragments on the underside of the sapphire mark the hours. These floating indices add to the feeling of depth.

#### THE CASE:

The 3-part watchcase acts as a subtle frame around the intricate movement. Its deceptively simple form follows the shape of the movement itself, with its crown at 12h the only symmetrical element to this otherwise unconventional watch. The case and crown have a mix of brushed and polished finishes, highlighting every angle and facet of their design.





THE NAME:

Mechanical Entropy is named after the concept of entropy used in physics to explain the second law of Thermodynamics, and subsequently the passing of time.

Entropy. n.:

Lack of order or predictability; gradual decline into disorder  
The second law of thermodynamics says that entropy always increases with time

Everyone has an intuitive understanding that time moves forward, that broken glass will not un-shatter, spilled milk will not un-spill. The scientific explanation of this is a concept called entropy, which explains that things always go from a state of order towards a state of disorder or chaos, but never the reverse. This is how we know time only moves forward (aka: the arrow of time).

Of course, if you delve deeper into the world of physics, we discover that one day your spilled milk may just un-spill – but we'll leave that to the physicists to deal with!

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## About Fiona's Chaos Collection

Answering the question “What is time?” has preoccupied the greatest minds in human history. Our obsession with time and our attempts to measure, control, surpass, and understand time have led to some of the most profound scientific discoveries, poignant works of art, and of course fine watchmaking.

Discovering the answers to this question was the catalyst for the Fiona Krüger Chaos collection – brought to life through her collaboration with renowned movement manufacturer Agenhor and featuring Fiona Krüger's first exclusive calibre: the Chaos movement.

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### INSPIRATION

Although the answer to time is rooted in the laws of physics, you don't need to be a physicist or Professor Brian Cox to relate, although it was Cox's explanation of the arrow of time and entropy that got Krüger thinking.

“We all intuitively know that time moves forward: we know that a broken glass will not un-shatter, spilled milk will not un-spill, ripped paper will not un-tear.” Says Fiona Krüger. “These are all examples of a phenomenon called entropy, which dictates that as time passes things always move from a state of order towards a state of disorder or chaos, but never the reverse.” (Of course, if you delve deeper into the realm of physics you realize that one day your spilled milk may un-spill, but we'll leave that to the physicists.)

“I love that contradiction between fine watchmaking which is all about precision, order and perfection in the quest to measure time versus time itself, which is always moving towards randomness, disorder and chaos.”

How to visually represent this idea as a timepiece led Fiona back to her fine art roots, looking at artists from the Dada movement, pop art and a particular installation by artist Cornelia Parker entitled “Cold Dark Matter: An Exploded view”.

“Even though this is a static work, it is incredibly dynamic, you can feel time passing, and so I wanted to recreate the visual equivalent of that dynamic feeling in this new collection, and the archetypal image of an explosion was the perfect way to do that”.

## EXPLODING TIME – THE CHAOS MOVEMENT

The heart of Fiona Krüger's Chaos collection is her Chaos movement, developed with Geneva based movement manufacturer Agenhor exclusively for her brand. Developing her own movement allowed Fiona the opportunity to create a dynamic mechanical drawing, fully integrating the aesthetic and mechanical aspects of her designs. The mechanism has been designed mid-explosion, as a snapshot of time passing. This intricate manual wind movement has a 50 hour power reserve.

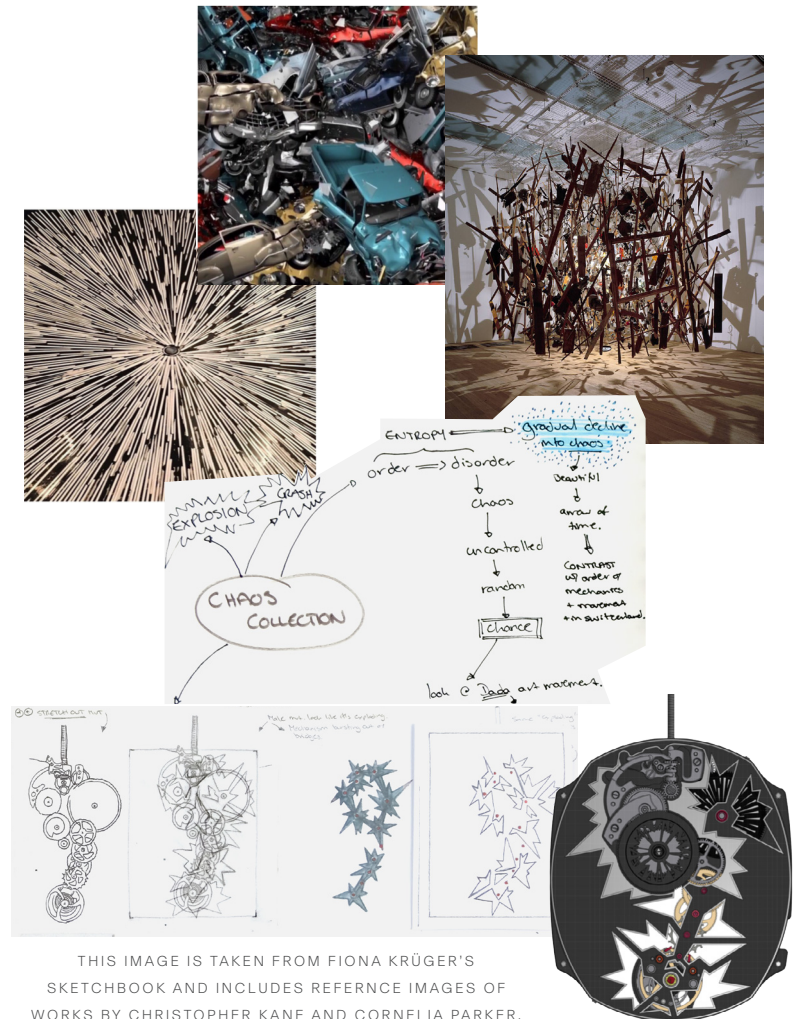
"An explosion is an image familiar to most people from an early age. We've seen it in comic books, cartoons, action films, fine art, documentaries about the universe and the big bang. It's an iconic image anyone can relate to, so it made sense to translate this to the heart of the timepiece, which for me is the movement."

Most mechanical watch movements are conceived to be as compact as possible, often resulting in a round shape. Krüger wanted to stretch out her movement, as though it was exploding, and in doing so reveal as many of the beautiful components as she could. The gear train stretches out the length of the mechanism, displaying each wheel on the path towards the erupting balance wheel. The shattered hour and minute wheels have been pushed off-centre and the bursting barrel of the main-spring is visible through the exploding main plate and bridges in the top right of the movement. As you wind up your watch the barrel turns, animating the eruption. Each distinctive section of the beautifully finished movement is delicately framed by various size explosions, building up in layers from the movement's bridges to the main-plate.

The graphic look of the bridges and main plate was achieved by developing a bespoke production process, combining familiar techniques and finishings in a new way. The plates and bridges have a brushed finish with a black PVD coating, while the openings and the larger surface explosion on the front of the movement were created with laser technology and a galvanic colouring process in either gold or rhodium.

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"The movement was very unusual to make because the positioning and production of the components was down to the aesthetic desired rather than our technical requirements." Explains François Merot, Director of Production at Agenhor "It is extremely rare to adapt the technical aspect of a movement to an aesthetic wish. Fiona's approach as to how to think of a watch movement is highly innovative. Her approach elevates the movement beyond being a technical element into something artistic".



THIS IMAGE IS TAKEN FROM FIONA KRÜGER'S SKETCHBOOK AND INCLUDES REFERENCE IMAGES OF WORKS BY CHRISTOPHER KANE AND CORNELIA PARKER.