

# The Long Now

Aaron Fagan, Senior Editor

“The Long Now is the recognition that the precise moment you’re in grows out of the past and is a seed for the future.”

—Brian Eno (founding board member of The Long Now Foundation)

The 10,000-Year Clock, also known as the Clock of the Long Now, is a visionary project aimed at fostering long-term thinking and responsibility. Located inside a mountain in West Texas on land owned by Jeff Bezos, this clock is designed to keep accurate time for 10,000 years, serving as a powerful symbol of longevity and sustainability.

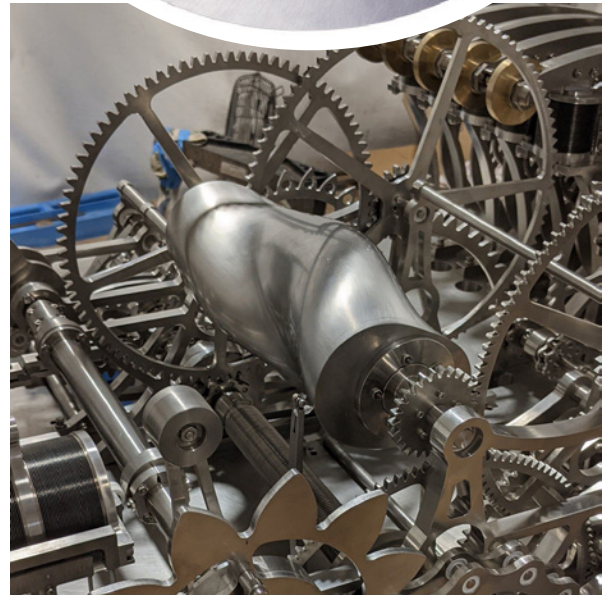
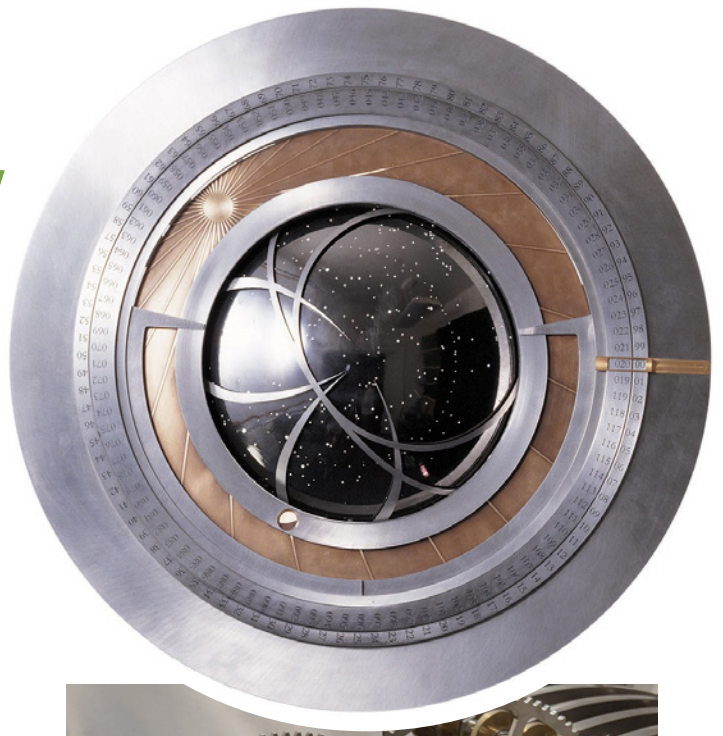
The clock is a creation of the Long Now Foundation, a non-profit organization founded in 1996 by a group including Danny Hillis, Stewart Brand, and Brian Eno. Danny Hillis, the lead designer, envisioned a timepiece that could endure millennia, challenging humanity to think beyond our lifetimes and consider the long-term impact of our actions. The clock is powered by thermal cycles—the difference in temperature from night to day—and mechanical winders, ensuring minimal human intervention.

At the heart of this ambitious project are its gears, designed and crafted with exceptional precision and durability. The gears were manufactured by Machinists Inc., a Seattle-based company renowned for producing high-quality, complex parts for industries like aerospace, medical, and energy. Their involvement underscores the high level of expertise and craftsmanship required to create components that can endure for ten millennia.

The gears are made from stainless steel and titanium, materials chosen for their strength, corrosion resistance, and long-term durability. These properties are essential for the clock to withstand the environmental conditions inside the mountain over thousands of years. The largest gears, with diameters measuring several feet, reflect the monumental scale of the clock and the robust nature of its mechanisms.

The production of these gears involves advanced machining techniques, including computer numerical control (CNC) milling and turning. These methods allow for the precise shaping and cutting necessary to meet the exact specifications of the clock. The precision of the gears ensures the smooth operation of the clock’s intricate mechanical system, which is crucial for maintaining accurate timekeeping over such an extended period.

The gears are installed deep within the mountain that was chosen for its geological stability and isolation. This controlled environment helps protect the clock from external influences and potential damage. Designed to require minimal maintenance, the clock’s choice of materials and the precision of its gears ensure it can run with minimal human intervention. This aspect is critical to the clock’s longevity and reliability.



Beyond their functional role, the gears carry significant symbolic meaning. They represent human ingenuity and the potential for creating lasting legacies. The intricate design and durable construction of the gears serve as a metaphor for the careful consideration and effort needed to address long-term challenges. They remind us of the importance of thinking beyond immediate concerns and focusing on the future of our planet and society.

The 10,000-Year Clock is a fascinating blend of art, engineering, and philosophy. Its gears, crafted with unparalleled precision and durability, are central to the project’s success. As a monument to long-term thinking and sustainability, the clock inspires us to consider the enduring impact of our actions and to become stewards of the future. By encouraging a broader perspective, the 10,000-Year Clock aims to foster a greater sense of responsibility and stewardship for generations to come.

[longnow.org](http://longnow.org)

