

a lot of Hot Air



Atmos 561 design by Mark Newson.



The Atmos clock by Jaeger-LeCoultre has reached its 80th birthday and with the latest version representing all that's cool in contemporary design, it shows no sign of aging.

David Stone

The idea of a timepiece powered by the daily fluctuations of outside temperature is one that seems to come direct from the private laboratories of those gentlemen scientists who helped shape the Enlightenment. You can just imagine the fervour and excitement felt by the likes of James Cox and John Joseph Merlin (the latter equally famous for having invented the roller skate!) as they applied their observations of the natural world, scribbled hastily down in inky leather-bound notebooks, to the creation of the Cox's Timepiece in 1760.

This particular landmark clock was powered by changes in atmospheric pressure via a mercury barometer, but the two were, alas, woefully inaccurate with their claim to have produced true perpetual motion. What they did do was to spawn a separate and rather obscure branch of horology, one that has continued to trickle down through the centuries to today.

The rise and fall

The Atmos clocks by Jaeger-LeCoultre owe much to this ancestry. The basic operation of the power source relies on the expanding and contracting of a contained substance, as the natural environmental temperature rises and falls. A hermetically sealed capsule containing a mixture of gas and liquid ethyl chloride will fill out into an expansion chamber as the heat increases. The expanding chamber subsequently compresses a spring, which will then slacken as the

temperature drops and the chamber deflates. This motion will in turn wind the mainspring.

A forerunner to the Jaeger-LeCoultre clocks, and one commonly referred to as the Atmos O, was designed by the French engineer Jean-Léon Reutter. Created in 1928 as a non-commercial prototype, Reutter's clock used an expansion device that incorporated a mercury-in-a-glass technique. Jaeger-LeCoultre entered the story some seven years later, when in 1935, the Neuchatel works shops developed the ethyl chloride solution together with the concertina motion of expanding and deflating. Production started and the Atmos family began.

Now, 80 years on, Jaeger-LeCoultre are celebrating this obscure octogenarian marvel with their latest version, only this time they have teamed up with contemporary design's golden boy, Marc Newson.

For those who are unfamiliar with the Australian design powerhouse, Newson came to prominence during the 1980s with his Orgone stretch lounge chair - a smooth, attenuated aluminium helix, which was designed to fit nicely under the Event Horizon table. Since then he has gone on to apply his 'universal life force' to the designing of everything from kitchen sinks to bicycles to a space

The Atmos 2007. Atmos clocks use a torsion pendulum, which involves a weighted disk or wheel suspended from a thin wire, called a torsion spring. Unlike a traditional swinging pendulum, the torsion pendulum will rotate about the wire, twisting it until enough forces is created to send the disk spinning back in the reverse direction. This action is similar to the balance wheel and hairspring found in watch.



(Left) Atmos Astronomique, shows hours, minutes and equation of time, with an astrological view of the heavens.

It's a stunning example of contemporary design, with its pure lines and ice cube form

craft (called Kelvin), and of course his own watch brand, Ikepod.

Ice cube aesthetics

It was Marc Newson himself who contacted Jaeger-LeCoultre and offered his services to create the next in this celebrated line of clocks. The Atmos 561 is encased within a large square crystal bubble, made by the famous Baccarat Crystal company, with the movement suspended in the middle of the transparent space, giving the clock a light ephemeral feel. The movement, encased within a sculptural arrangement of circles, shows the hours and minutes around the main dial, while the calendar month and moon phase appear on two separate central disks, one on top of the other. It's a stunning example of contemporary design, with its pure lines and ice cube form, and also an aesthetically engaging departure from the Atmos clocks that had preceded it.

The Atmos 561 is actually one of three clocks Jaeger-LeCoultre have created for their 80 year milestone. The Atmos Astronomique, with its equation of time complication, bears little resemblance to Newson's

modern minimalist interpretation. The large central dial contains a deep blue star chart that tracks the constellations of the northern hemisphere, while an astrological view of the heavens, inspired by Andreas Cellarius' 17th century *Harmonia Macrocosmica* cosmographic atlas, has been etched upon the glass panels fanning out on either side. The third clock, the Atmos Marqueterie, has a box decorated with hundreds of inlays of precious wood and gold leaf, arranged to create a sumptuous reproduction of Gustav Klimt's *Portrait of Adele Bloch* - the painting that sold for a record \$135 million in 2006. This opens up to reveal the timepiece suspended in a square glass case, with a moon phase above the torsion pendulum.

Since its creation during the 1930s the Atmos has gone on to sell some 750,000 models (Winston Churchill and General Charles DeGaulle were both owners), so it seems likely that the Atmos 561's limited edition of 888 will go quickly and, judging by the examples thrown up by brands like Hermès and de Grisogono at Baselworld 2008, interest in luxury clocks looks to be on the increase. ☺



Atmos 2005.

Atmos Marqueterie is a clock contained within a box that is decorated with a reproduction of *Portrait of Adele Bloch* by Gustav Klimt.

