

Volanus®

The first clock in the world moved by piston



HISTORY

Clocks in Reggio Emilia

In 1493, a clock movement with an innovative aesthetic was invented by Gian Carlo Raineri in Reggio Emilia. The Most Serene Republic of Venice commissioned to Mr Raineri the construction of this amazing time measuring machine that became the clock tower of the Moors of Venice.

On February 1st 1499, the Doge Agostino Barbarigo inaugurated the clock, located in the Piazza San Marco in Venice, which has become one of the most famous and popular clocks in the world.

Still in Reggio Emilia, in 2012, Renato Rinaldi invented another clock movement with an innovative aesthetic. From this idea, of which the original sketch is here represented, the wonderful piston motion clocks are manufactured by mechanic artists in a small workshop.

A NEW CLOCK MOVEMENT

In all clocks manufactured up-today, the propulsive element, either a spring, or an electric motor, a stepper motor, a weight, etc. ..., has always been considered as a mechanism more to hide than to show. This new solution is exactly the opposite, since the motor of the clock becomes the protagonist. By using a magnetic piston linked to the connecting rod, crank and flywheel, a completely visible, harmonious and fascinating movement, typical of reciprocating machines, amazing for its incredible ease of operation, has been created. A delicate balance between magnetic forces and masses allows the motor shaft to run steadily and silently at the reduced speed of 20 rpm. In this way the piston will performs 57.600 strokes per day and 21.024.000 strokes per year.