

ABSTRACT

The present invention relates to a manufacturing method of a mechanical watch comprising a movement having a spring composing a power source of the mechanical watch, a front wheel train which rotate by rotational force which arises when the spring is unwound and an escape and governor for controlling the rotation of the front wheel train. The escape and governor comprising a balance which repeats right and left turns alternately, an escape wheel & pinion which rotates based on the rotation of the front wheel train and a pallet fork which controls the rotation of the escape wheel & pinion based on the operation of the balance. The balance comprising a hair spring, a balance stem and a balance wheel.

In the inventive mechanical watch manufacturing method, the movement (400) of the mechanical watch is assembled at first. Then, the rates of the assembled movement (400) are measured for a plurality of "vertical positions" in the state in which it is disposed at the "vertical position". The total adjustment of the balance (140) is calculated based on the result of measurement of the rate.

Then, the oscillating length of the hair spring (140c) to be adjusted is calculated based on the result of calculation of the total adjustment of the balance (140). Next, the oscillating effective length of the hair spring (140c) is adjusted by oscillating a hair spring controlling

piezoelectric element (454) which is disposed in contact with the hair spring (140c) based on the result of calculation of the length of the hair spring (140c) to be adjusted.