

# Introducing openmovement

Christian Dannemann

A huge opportunity for watch manufacturers

We are all familiar with various movement manufacturers and how the watch industry is split into companies that use in-house movements and those that use 'off-the-peg' movements.

The in-house area isn't that well defined, as lots of manufacturers claim to have their own calibres but use standard movements (usually ETA), that they claim to have modified. For the watch buyer this is a cloak-and-dagger operation, made to confuse. and to make them believe that they are buying a watch with a true in-house movement.

Time for some openness and for a totally new approach to movement design. Five Swiss watchmakers have got together to develop an open-source construction for a watch movement. The plans for the components will be freely available and anyone can use them to make the movement or parts for the movement. There is no copyright and no royalty to pay. This will also enable schools to use the plans to teach their students and watchmakers to make parts to repair such a movement without any problems. More likely they will be able to choose parts from a pool of manufacturers once this design approach takes hold.

The first movement coming out of this project is the OM10 – a manual wound movement, 30mm diameter, sub-second at 6 or 9 o'clock, with a later automatic winder option, beating at 25,200 bph, with 50 hours of power reserve and a date with quick-set function. The construction will allow a manufacturer to finish the movement to chronometer grade if he wishes to do so.

Further projects are the OM20, with a smaller diameter (25.6mm), a central second, and a base movement that is constructed in a way that it will be easy to add further complications later, such as a chronograph or other features.

Once the development of the OM10 is complete, detailed construction drawings will be released and the manufacture of construction kits will begin. This will enable even small watch manufacturers to build a watch with a unique movement, that is not off the ETA peg, but something that is much more interesting for the watch buyer.

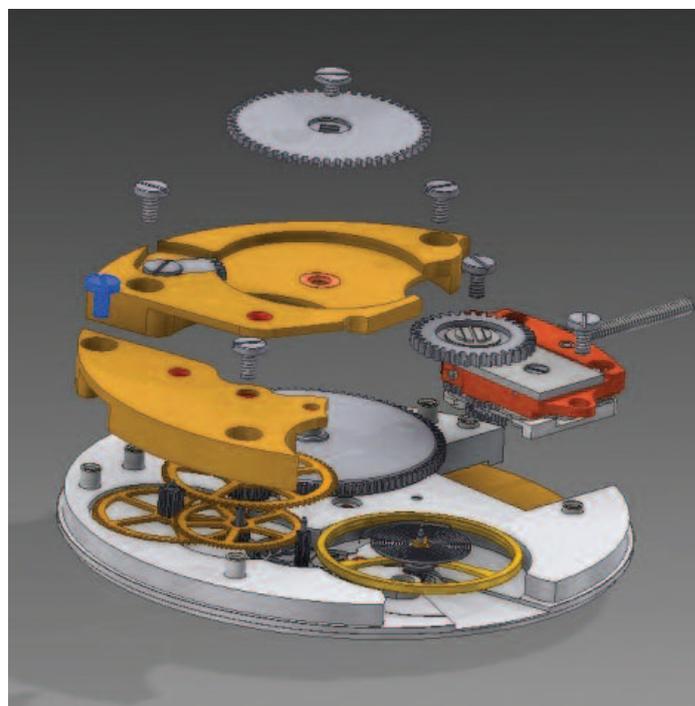
One can imagine that movement manufacturers all over the world will use the construction drawings to make complete movements in various grades for the watch industry.

Roman Winiger, President of openmovement, says: 'I am fascinated by the idea that a watch restorer in a hundred years

time will still have access to the plans of the movement, and will thus be able to make the replacement for a worn part with ease. The restorer will become a bearer of the knowledge, which will continue to live through him.'

This is a vision that goes far beyond just having an open source movement, but to make a piece of watch history that will stand out from anything we have seen so far. Currently all the knowledge about a movement is held with the manufacturer and it will stay there until it is finally lost. The openmovement movements will be able to live on for hundreds of years with the ability to be reproduced to the exact original specifications.

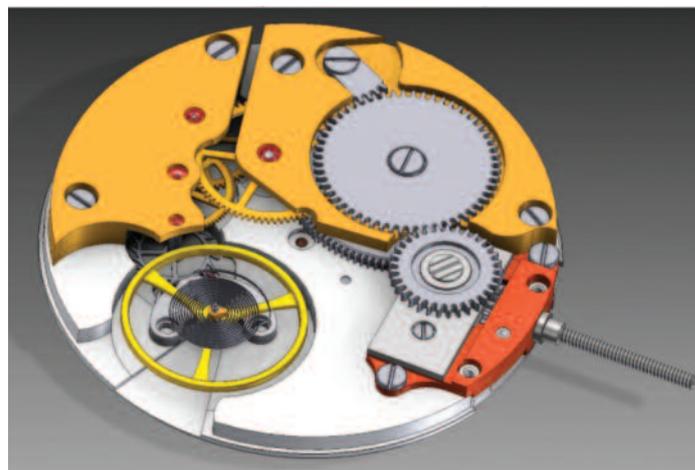
Looking at the first version of drawings you can see that even though the OM10 is simple, it does not lack finesse. No wire springs to be seen anywhere and the separate assembly for the



A modular view of the OM10. Note the separate assembly for winding/setting, which will allow further extensions to the movement.



The OM Committee – Roman Winiger, David Olafsson, Marion Mueller, Cedric Auberson and Philipp Wittwer.



A simple construction of timeless elegance.

winding/setting mechanism will allow easy extension of the OM movement range in the future. The movement is fairly thin and elegant and has all it takes to become a true classic. The bridge shapes and the click in the images below are placeholders at the moment. The final shapes will be determined in a group-orientated process. All registered openmovement supporters will be notified as soon as the shapes are agreed.

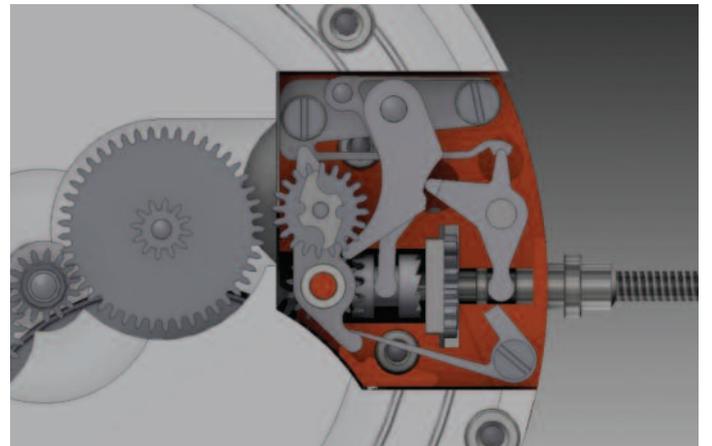
This is a huge opportunity for watch manufacturers that have been hit by the Swatch embargo as they can not use ETA movements any more. openmovement will allow them to use something of timeless elegance, and choose a manufacturer of their choice, rather than having to go with what a manufacturer can offer them.

The keyless works. Two notable construction details here: firstly, no wire springs but a nice machined setting lever spring. Secondly, an effective quick-set date construction that will work reliably

Over time new contributors will emerge and add more and more open source additions to the base movement so that, in the long run, we might see anything from triple date movements to three register chronographs.



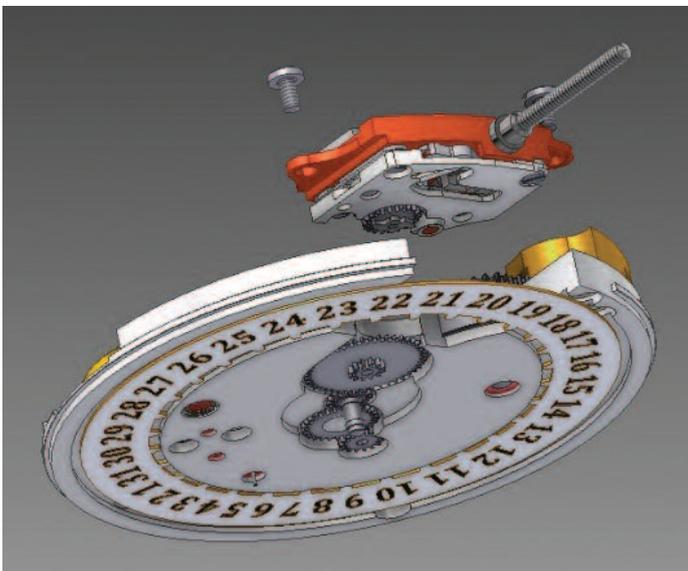
The quick-set mechanism with the date ring in place.



The keyless works without the date ring.

If you feel that this is a positive step in the right direction, please support openmovement by becoming a member at:

[www.openmovement.org/?mitmachen](http://www.openmovement.org/?mitmachen)



The modular keyless works allow future modifications.