



RESSENCE

BEYOND HANDS

This is a world first for a mechanical watch. And it's been done with good reason. Since the laws of hydraulics state that a liquid cannot be compressed, this oil compensates for pressure underwater. And there are other advantages too: the oil keeps those components constantly lubricated. And since they are suspended in a liquid, they are lighter and hence require less power to move, which in turn improves time-keeping. The result is a watch both more ergonomic and considerably lighter than traditional diver's pieces too.

NO MIRROR REFLECTION UNDER WATER

There is one more advantage to the use of oil, crucial to the success of a diver's watch. It cancels out what is known as Total Internal Reflection. Typically, when under the water, a traditional diver's watch needs to be viewed straight on in order to be read properly - otherwise refraction turns the glass into a mirror. But not with an oil-filled watch: this gives it complete legibility whatever the angle of view. "And isn't it time for a diving watch to be legible under water?" asks Benoît Mintiens.

MAGNETIC TRANSMISSION

The TYPE 5's internal architecture comprises two halves - the upper chamber, comprising the ROCS 5, filled with oil; and a lower, dry chamber containing the movement, divided from the upper by way of a grade 5 titanium, hermetically-sealed membrane.

To transmit the primary minute information from the movement to the ROCS, the TYPE 5 ingeniously uses connected micro magnets - while a number of protective measures ensure the magnetic fields these create do no harm to the regulator. It is another nod to TYPE 5's inspiration of the sea turtle: much like the watch uses the natural phenomena that are magnetic fields to move, so sea turtles use them to find their way through the oceans.

BELLOWS SYSTEM

TYPE 5 cleverly compensates the use of oil, as its volume in the watch will fluctuate with temperature. The watch is therefore fitted with a system of seven small bellows. These compress when, with rising temperature, the oil volume increases, or expand if the temperature drops and the volume decreases - the result perfectly stabilises the fit of the oil within the watch. The system is directly connected to the oil temperature gauge on the dial - so the TYPE 5 owner can see a representation of the bellows capacity in action.

Like RESSENCE's other models, the Type 5 has no crown - rather, the case-back is used both for winding and setting the time of the watch. But, to ensure maximum water-resistance, a new case-back has been specially developed for the TYPE 5. Dubbed the Resence Compression Lock System, or RCLS, it has a system for the locking and compression of the gasket, with two positions, 'lock' and 'set'.

