## In time with the "vortex"

## 与漩涡共舞

Just recently, Konstantin Chaykin finished creating a one-minute tourbillon clock, Tourbillon 55. It's no secret that the unique mechanisms distinguish all the creations of the famous Russian watchmaker. True connoisseurs of horology know him for such creations as the Mystery watch, the Al-Biruni Arab astrological clock, the Lunokhod watch and many others. Konstantin Chaykin is so far the only Russian watchmaker accepted to the Academy of Independent Watchmakers (AHCI).

最近,Konstantin Chaykin 推出了一分钟陀飞轮座钟: Tourbillon 55。众所周知,令这位俄罗斯著名制表大师的作品与众不同的正是其独特的机械构造。真正的钟表鉴赏家是通过Mystery 腕表、Al-Biruni Arab 占星时钟、Lunokhod 腕表等作品了解他的。迄今为止,Konstantin Chaykin 是唯一一位独立制表师协会(AHCI)认可的俄罗斯制表师。

The main role in the new Tourbillon 55 desktop clock is assigned to the one-minute tourbillon (which stands for "vortex" in French) that crowns the gear wheel structure. However, the one-minute tourbillon is interesting not only from the aesthetic side. It is also assigned an additional feature of the second hand as the anchor mechanism, located inside a moving platform with the balance in the center, makes a complete revolution around its axis in exactly one minute. The presence of the tourbillon has always been considered a sign of an expensive, high-status watch; its design and creation require exceptional skills and many hours of highly skilled labor.

全新 Tourbillon 55 座钟的主要作用与大齿轮顶端的一分钟陀飞轮(在法语中意为"漩涡")有关。不过,一分钟陀飞轮可不仅仅是外形美观有趣。它位于摆轮运动平台中央,能在一分钟之内精确绕轴旋转一圈,为秒针附加锚式机构功能。陀飞轮一直是昂贵、高端钟表的标志,它的设计和制作需要特殊技艺和技术高超的钟表师的长时间工作。

It took over 1,000 hours of painstaking work to create Tourbillon 55. The result is not just a watch, but a real piece of horological art, a perfect agreement of internal and external perfection.

制作 Tourbillon 55 座钟需要 1000 多个小时的精心劳作。其成果并不仅是一台时钟,而是一个真正的钟表艺术品,一件内外兼修的完美之作。

The clock mechanism consists of hundreds of tiny components. Some parts were so petite that the masters had to carry out a very elaborate work assembling them with a special microscope. The unique mechanism consists of 11 stones and 6 precision bearings, and ring-fixed, gold-plated chatons fastened with screw. Geneva stop located on the barrel drum limits the spring torque increasing accuracy movement.

这台座钟由数百个小零件组成。有的部件极为细小,制表师必须使用特殊显微镜才能将 其精确组装成形。它的独特机械结构包括 11 颗宝石、6 个精密轴承以及螺钉固定的镀金 底盘。发条鼓上的日内瓦式发条限上装置限制了发条扭矩,从而提高了机芯的精度。 Such a complex mechanism has very modest dimensions - it is only 15 cm in height. To highlight its perfection, its case was made of precious wood.

这件作品结构如此复杂,尺寸却毫不夸张——高度仅 15 厘米。为了凸显其完美品质,制表师采用珍贵木材制造表壳。