



ARNOLD & SON

SINCE 1764

**Royal Collection – TBTE
Pre-BASELWORLD 2015**

**Timeless elegance and innovative technology:
Arnold & Son's new TBTE Tourbillon**

True to English watchmaking heritage, Arnold & Son unveils the TBTE Tourbillon, featuring the hand-finished A&S8503 calibre with True Beat Seconds complication. This defining timepiece is part of the Royal Collection which combines classic styling with leading-edge technology.

The tourbillon movement, one of the most elegant complications in the world of horology, has played a crucial role in Arnold & Son's history. An exceptional watchmaker, John Arnold was an active participant in one of the most extraordinary partnerships in the world of innovative horology. Indeed, both he and A.-L. Breguet worked closely, sharing both their knowledge and passion. Evidence of their partnership is A.-L. Breguet's first ever tourbillon mounted in John Arnold's No. 11 movement, a watch that can be found today in London's British Museum.



TBTE

Exclusive Arnold & Son tourbillon movement A&S8503, hours, minutes, true beat seconds and tourbillon, black open dial, 18-carat red gold case, diameter 44 mm

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Arnold & Son SA, Switzerland, March 2015



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The TBTE not only boasts a tourbillon but also a true beat seconds mechanism. The true beat seconds is a traditional complication of Arnold & Son, a complication that alludes to the precision timekeeping required for navigation at sea. Unlike conventional mechanical watches, a true beat seconds movement measures out time in complete seconds rather than fractions dependent on the balance frequency. This watch thus pays tribute to the watches produced by John Arnold and his son, when they were the first to develop marine chronometers that could be produced in quantity at reasonable prices. Those technically superior, widely distributed chronometers reflected Arnold & Son's commitment to exceptional precision and solved the problem of determining longitude at sea.



A&S8503

Backside of the movement showing the true beat seconds and the lever shaped like an anchor – paying homage to Arnold's maritime achievements

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Upholding that legacy, Arnold & Son's master watchmakers and engineers thrive on creating new complicated movements for exquisite timepieces. Such is the case with the TBTE watch, a truly innovative, technical and architectural achievement. While the true beat seconds are displayed by a large central hand on the dial side, the mechanism itself is located in all its beauty on the reverse of the movement. Thus, having the tourbillon located dial side, the movement has an intriguing complication to admire on each side. Making the true beat seconds complication even more alluring is the fact that the true beat seconds bridge is shaped like a Celtic battle axe and the lever like an anchor – paying homage to Arnold's maritime achievements.

Aesthetically what sets Arnold & Son's new TBTE Tourbillon apart is its modern take on the distinguished "English" movement design: The main pivoting elements in the movement are mounted on their own bridge. The tourbillon and motion-work bridges are classically triangular but are skeletonised. The combination of multilevel bridges and open-worked main plate gives an incredible depth and three-dimensional effect to the watch and thus a modern look. The unique Arnold & Son design is also reflected by the three-spoke wheels. This same three-spoke design can also be found in the tourbillon cage and the openings in the main plate. The decoration of the main plate is a reminiscence of an old *guilloché* pattern found on the cases of antique Arnold & Son pocket watches. The main plate is also skeletonised around the barrel and the tourbillon carriage allowing to look through the movement and therefore through the watch itself.



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When compared to more conventional tourbillons found today, the TBTE model is said to be “inverted”, that is to say most technical elements and visually interesting features are shown on the dial side, when those would normally be hidden on the reverse of the dial. Other typically English technical idiosyncrasies will seduce even the most demanding watch connoisseurs. Take, for instance, the solid gold chatons or the symmetrical layout of the movement; to achieve such a feat requires overcoming a number of technical challenges. Thus the barrel spring and the tourbillon cage are centred along the watch’s longitudinal axis. When examining the gear train and the winding system, one notes the traditional construction used in high-end pocket watches that involves the use of “wolf-teeth”, an asymmetrical tooth system featuring curved teeth used primarily to improve the smoothness of the overall movement and to enhance its elegant design.

It goes without saying that every finishing touch on this striking piece, with such movement decoration as hand-chamfered bridges and, even more demanding, hand-chamfered wheels with polished edges has been done by hand by Arnold & Son’s master watchmakers, hence bringing more brilliance and depth to each decorative element.

This unique timepiece will be produced in a limited edition of 28 pieces, in a 44 mm 18-carat red gold case.



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Main technical characteristics

Calibre:	A&S8503
	Exclusive Arnold & Son tourbillon movement, hand-wound, 26 jewels, diameter 32.6 mm, thickness 6.98 mm, power reserve 72 h, 21,600 vibrations/h
Functions:	hours, minutes, true beat seconds, tourbillon
Movement decoration:	nickel-silver movement, rhodium treated bridges and NAC grey treated main plate with superlative <i>Haute Horlogerie</i> finishing: hand-chamfered bridges with polished edges, A&S specific pattern engraved on the main plate, circular satin-finished wheels with hand-chamfered and polished edges, screwed gold chatons, mirror-polished tourbillon cage and bridge, screws with bevelled and mirror-polished heads
Dial:	black open dial
Case:	18-carat red gold, diameter 44 mm, cambered sapphire with anti-reflective coating on both sides, see-through sapphire case back, water-resistant to 30 m
Strap:	hand-stitched black or brown alligator leather
Limited edition:	28 timepieces
Reference:	1TEAR.G01A.C113A

For **high resolution images** please find here the link:

<http://www.arnoldandson.com/home/news-events/press-corner.aspx>

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