

COMPARATIVE TEST: TUTIMA VS. TISSOT

T-TIME



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Two brands with the letter “T” for their logos send their divers’ wristwatches to our comparative test, which pits Tissot’s Seastar 1000 one-on-one against Tutima’s DI 300. Water-resistant to 300 meters, each of these divers’ watches can satisfy professional requirements, yet both sell for entry-level prices under \$1,300.

BY JENS KOCH

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Divers' watches have to be exceptionally sturdy and extremely watertight. It doesn't matter whether you ever actually subject your watch to the level of water-pressure designated on the dial, but it gives you a good feeling to know that if you did, the watch would survive. It's comforting to have a watch that can take more punishment than you're likely to dish out. It's a bit like driving a luxurious SUV: it would be a pity to actually drive it off-road, but part of the appeal comes from knowing that you could – if you ever really had to.

Tissot's Seastar 1000 and Tutima's DI 300 can stand up to 300 meters' worth of water pressure, a more than adequate level for most divers. Forty meters (about 130 feet) is the maximum recommended depth for recreational divers because the likelihood of suffering nitrogen narcosis (a feeling of drunken giddiness that can lead to fatal mistakes) due to nitrogen poisoning increases at greater depths. Training and habituation can somewhat reduce this danger, but dives begin to become hazardous (even for well-trained divers) at 70 meters or deeper because of the additional danger of oxygen poisoning. Both watches are able to descend more than deep enough to satisfy the ordinary requirements.

What else is important for a divers' watch? Nowadays every diver is equipped with a diving computer to measure diving depth and time and to calculate decompression times and depths. But just in case your computer malfunctions, it's advisable to have a backup up your sleeve. That's why every diver should take along on every dive a bathometer with maximum-depth memory, a decompression table, and a divers' watch. The watch is above all important to keep track of elapsed diving time. To accomplish this, the diver turns the rotating bezel prior to the dive, setting it so that its luminous index is directly opposite the watch's minute hand. As the minute hand progresses during the dive, its tip always points to the number of minutes that have elapsed since the bezel was pre-positioned, i.e. how long the diver has been underwater.

For safety's sake, the bezel on each of these divers' watches rotates in one direction only: counterclockwise. If the bezel should ever shift accidentally, it can never show a shorter-than-



Professional: Tutima's no-nonsense DI 300

Advantages

- + Pleasant to wear
- + Adequately legible
- + Very good rate results

Disadvantages

- Bracelet's design is a bit old-fashioned

actual elapsed dive time, which would dupe the diver into choosing unduly brief decompression times.

It also makes sense for the bezel to be calibrated and click into place at one-minute intervals. This facilitates precise setting. There are several other features found on many divers' watches. The bezel often has a luminous index, and the seconds hand is often luminous, too,



DATA PAGE

Tutima DI 300

Manufacturer: Tutima, Ganderkesee, Germany

Reference number: 629-12

Functions: Hours, minutes, seconds, date, day of the week, divers' bezel rotates in one direction only.

Movement: Eta 2836-2, automatic, 28,800 vibrations per hour, 25 jewels, Etachron fine regulation, stop-seconds function, diameter = 25.6 mm, height = 5.05 mm

Case: Pure titanium, sapphire crystal is non-reflective on one surface, threaded back made of pure titanium, screwed crown, water-resistant to 300 meters

Band and clasp: Pure titanium, secure folding clasp with foldout extension.

Results of running test:

| | |
|---------------------------------------|------|
| (deviations in seconds per 24 hours): | |
| Dial up: | +3 |
| Dial down: | +3 |
| Crown up: | 0 |
| Crown down: | +2 |
| Crown left: | 0 |
| Crown right: | 0 |
| Greatest deviation of rate: | 3 |
| Average deviation: | 1.3 |
| Mean amplitude of balance: | |
| Flat positions | 298° |
| Hanging positions | 268° |

Dimensions: Diameter = 43.8 mm; height = 12.5 mm; weight = 119 grams.

Price: \$1,250

Well-protected: an Eta 2836 is ensconced beneath the case's titanium back.



Young, dynamic, successful: Tissot's Seastar 1000

DATA PAGE

Tissot Seastar 1000

Manufacturer: Tissot, Le Locle, Switzerland**Reference number:** T 19.1.593.51**Functions:** Hours, minutes, seconds, date, divers' bezel rotates in one direction only.**Movement:** Eta 2824-2, automatic, 28,800 vibrations per hour, 25 jewels, Etachron fine regulation, stop-seconds function, diameter = 25.6 mm, height = 4.6 mm.**Case:** Steel, non-reflective sapphire crystal on both sides, transparent window in back, screwed crown, water-resistant to 300 meters.**Band and clasp:** Rubber strap, secure folding clasp made of steel with foldout extension.

Rate Results

(deviations in seconds per 24 hours):

| | |
|-----------------------------|-------|
| Dial up: | +13 |
| Dial down: | +14 |
| Crown up: | +15 |
| Crown down: | +10 |
| Crown left: | +8 |
| Crown right: | +17 |
| Greatest deviation of rate: | 9 |
| Average deviation: | +12.8 |
| Mean amplitude of balance: | |
| Flat positions | 300° |
| Hanging positions | 280° |

Dimensions: Diameter = 43.9 mm; height = 15.4 mm; weight = 132 grams.**Price:** \$495

Advantages

- + Appealing design
- + Attractive price

Disadvantages

- Buckle is painful
- Legibility is limited
- Rate results could stand some improvement

line. Nor is it without good reason that NATO and German Air Force pilots rely on Tutima's Military line of pilots' chronographs. One chronograph in this collection (the TL pilots' chronograph with rotating bezel) served as the basis for the DI 300 divers' watch. You'll probably require a bit of practice to get used to turning the partially recessed bezel, but you'll quickly learn to grasp it from the sides. Right from the start, you'll

appreciate the advantage of the inset bezel, which ensures that it doesn't catch or snag anywhere. Tutima likewise gave extra effort to the design of the crown. When it's unscrewed, it disengages and can be very readily rotated. As far as appearances go, this watch embodies unobtrusive styling, with the sole exception of the eye-catching orange color used on the dial. If you feel that this hue makes an otherwise inarguably functional watch look too extreme, you can order the DI 300 with a classic black dial. When it's delivered, you'll have an understated, unostentatious, yet nonetheless professionally equipped diving companion.

A foldout extensible piece in the clasp is another professional feature provided by both watches. Tutima's secure folding clasp makes a more appealing impression and has been milled from a solid block of titanium. Tissot's simple sheet-metal clasp stays closed just as securely, but it presses painfully

against the inside of the wrist, which makes it something of a nuisance. Tissot's rubber strap is a good match for the Seastar 1000's design and is adorned with a wave pattern on its inner surface. The strap bends abruptly near the lugs, a detail that takes some getting used to. The Seastar's legibility is good, although the spiffy design of its dial, hands, and indices can be somewhat distracting. For example, the design of the hands is rather playful, as is the letter "T" on the big index at the "12." The prominently domed crystal has a magnifying effect. This looks good, but beginning at a certain angle of obliquity, it causes the dial to disappear entirely. On the other hand, Tissot's contestant is ob-

The Tutima's orange dial isn't merely a designer's quirk: it's intended to enhance legibility, especially in murky water.

so the wearer can easily ascertain in the dark if the watch is still running. Neither the Tutima model (which lacks luminous material on its seconds hand), nor the Tissot watch (which doesn't have a continuous minute-circle on its bezel) offers all these benefits, but both are well suited for diving. The unobtrusive seconds hand on the Tutima DI 300 increases the legibility of the minutes and hours.

This watch's orange dial isn't merely a designer's quirk: it's intended to enhance legibility, especially in murky water. Indeed, every detail of this watch has been designed to maximize functionality. The pure titanium case and bracelet are non-allergenic, and their matte finish makes them less susceptible to scratches, reflections, and fingerprints. The agreeably rounded case and supple bracelet can't possibly scratch the diver or his equipment, and the screwed connections between the bracelet and the case ensure that the timepiece and the aquanaut never part company accidentally. It's no wonder that the DI 300 satisfies professional requirements: after all, it's part of Tutima's practicality-oriented Military

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viously more chic than Tutima's. An astute sense of contemporary design is evident in many details of the Tissot watch. For example, the two-tone lacquered bezel starts out on a straight horizontal, then slopes neatly downward at a 45° angle; red and white calibrations against a black background are in keeping with a popular trend among sporty watches; and the distinctive angular case juxtaposes satin-finished sides and polished front surfaces for an attractive contrast. The wearing comfort, however, is less than optimal. The bezel feels a bit rough, but the roughness makes it all the more readily graspable. The grooves on the crown aren't entirely comfortable against the back of the wrist, but they ensure non-slip operation when you take the crown between your fingertips.

The Tissot is certainly more chic than the Tutima, and its price is unbeatable.

The back side of the Seastar has a maritime look. Six screws along the periphery (which bulges outward to accommodate them) combine with a circular, off-center window to make the back resemble a ship's porthole. The eccentric position of the window lets you watch the little black diver on the rotor come into view and disappear again. That's a cute idea, but here, too, the little window with its palpable protrusion is apt to subject you to an unsolicited acupuncture treatment.

Tutima holds its cards close to its vest. The opaque titanium back shields the Eta 2836 from voyeuristic gazes. Like the Eta 2824 inside the Tissot watch, the Eta 2836 in Tutima's model has been left more or less unembellished: as is, it's neither an eyesore nor a sight for sore eyes. From a functional point of view, these two calibers differ only in that Tutima's supports an additional day-of-the-week display that Tissot's caliber lacks. This extra indicator is a practical feature and it's unobtrusively integrated into the face of the DI 300. Of course, knowing what day of the week it is isn't an essential piece of information during a dive.

Durability and accuracy of rate are the most important attributes for the caliber of a sporty watch. The Eta 2824, and thus also the 2836 that's based on it, are truly first rate as far as their ability to take punches goes. The 2824 is 4.6 mm tall, which makes it 22% thicker than the Eta 2892, which is the other automatic movement that's freely available on the market these days. Greater thickness makes it possible to use more generously proportioned wheels and other components, which translates into greater reliability when the watch is

| TEST RESULTS | |
|--|------|
| Tissot Seastar 1000 | |
| Band and clasp (max. 10 points): | 6 |
| The rubber strap looks good, but the clasp is very simple. | |
| Operation (5): | 5 |
| The readily graspable crown and bezel make it fun to set this watch's displays. | |
| Case (10): | 7 |
| Neatly crafted case with elaborate porthole in the back. | |
| Design (15): | 13 |
| Like fashions for the summertime – chic, zesty, and sporty. | |
| Legibility (5): | 3 |
| The domed crystal has a magnifying effect, but playfully ornate hands and indices don't simplify the task of reading the watch's displays. | |
| Wearing comfort (10): | 5 |
| The pane in the back has a high edge; the crown is sharp; and the clasp presses uncomfortably against the inside of the wrist. | |
| Movement (20): | 11 |
| Tried-and-tested, large-series item, unembellished except for the diver on its rotor. | |
| Rate results (10): | 6 |
| We've seen the Eta 2824 perform better elsewhere. | |
| Overall value (15): | 13 |
| A lot of wristwatch for relatively little money, Tissot's watch embodies a superlative cost-benefit ratio. | |
| TOTAL: 69 points | ★★★★ |

Like looking through a porthole: an Eta 2824 with a diver on its rotor





T for two: both clasps bear the letter “T” and each can be extended so the watch can be worn over the sleeve of a wetsuit.

TEST RESULTS

Tutima DI 300

Band and clasp (max. 10 points): 7
Simple but without weak points; pure titanium clasp and bracelet show no weaknesses.

Operation (5): 3
The partially recessed bezel must be grasped from the sides..

Case (10): 8
Beautifully rounded case made from matte-finish, non-allergenic, pure titanium

Design (15): 12
Form follows function; the orange-colored dial adds pizzazz to the appearance.

Legibility (5): 5
Excellent contrast combines with no-nonsense hands and indices to ensure clear legibility under all lighting conditions.

Wearing comfort (10): 8
Comfortable bracelet made of warm titanium; neither bracelet nor watch has any sharp edges.

Movement (20): 10
Function takes precedence over beauty; the unembellished Eta caliber reliably does its job and remains unobtrusively out of sight under the case’s titanium back.

Rate results (10): 9
Excellent rate results; minor deviations among the various positions; very well regulated.

Overall value (15): 11
The cost-benefit ratio can’t compete with that of Tissot’s watch, but the Tutima is less common.

TOTAL: 73 points ★★★★★

subjected to vibrations and shocks. We tested the accuracy of each watch’s rate on our timing machine. Tutima’s timepiece delivered sterling performance. Its daily deviation varied in the individual positions from ± 0 to +3 seconds. The amplitude of its balance was satisfactory in every position. The performance of the Tissot divers’ watch wasn’t nearly as good. Daily deviations ranging from +8 to +17 seconds indicated that it had been adjusted to gain heavily. And 9 seconds for the “greatest deviation of rate” value means that it runs the risk of running irregularly and causing different daily deviations on the wrist. This risk, however, didn’t materialize during our second test. In actual wear, the Tissot gained 11 seconds and the Tutima lost 2 seconds.

As far as the price tags are concerned, Tissot’s \$495 price is extremely appealing. This cost-benefit ratio is very nearly unbeatable. The reasons are twofold: first, this watch is manufactured in very large numbers so Tissot can purchase components more cheaply and narrow the profit margin on each individual wristwatch; second, Tissot belongs to the same concern that manufactures Eta movements, so we can assume that the calibers are available to Tissot at a favorably low price.

With a price tag of \$1,250, Tutima’s DI 300 sells for twice as much. Its metal bracelet doesn’t justify the higher cost: after all, paying a mere \$30 extra will get you a Tissot Seastar 1000 with a steel bracelet. On the other hand, it’s made merely of steel, compared to the warm shimmer of pure titanium, a noble material that’s notoriously difficult to process. Direct comparison of the two watches also reveals that the more costly timepiece is also more meticulously crafted. Excellent wearing comfort and a high degree of functionality tip the scales in Tutima’s favor, especially if you’re actually planning to take it along on a dive. Of course, Tissot’s watch is also well suited for underwater work. If a lower price and good looks are important to you, then you’ll no doubt find the Seastar quite tempting. This watch’s clasp, however, isn’t entirely comfortable, so if comfort is a priority, we’d advise you to think twice. There’s an old adage that says you have to suffer to be beautiful. If this watch is any indication, then that saying seems to be as true below water as it is above the waves.