30 JAHRE DEUTSCHE EINHEIT • DEUTSCHER U-BOOT-STAHL • 1010.0000 • 300/300

U1

Sinn

U1 DE

EN

Sinn

SPEZIALUHREN ZU FRANKFURT AM MAIN

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DEAR CUSTOMER,

Since the company was founded in 1961, we have focused on the creation of high-quality mechanical watches. Nowadays, watch lovers associate innovation and patents with the name of Sinn Spezialuhren. And it’s not just our diving watches that stand for high performance, robustness, and durability, quality and precision.

These watches do, however, constitute an outstanding example of how we repeatedly push the limits of what can be achieved physically in development.

We are driven by the question of which new technologies and materials can be used to make diving watches safer and more suitable for everyday use.

It is often worth indulging in a little lateral thinking to see what is going on in other industrial sectors or fields of science. It is therefore no coincidence that the series U1, U2, U50, U212 and UX are made of high-strength, seawater-resistant German Submarine Steel. The series T1 is another example. All case parts for this mission timer are made of high-strength titanium. Both submarine steel and high-strength titanium predestine our diving watches for use in salt water.

Fittingly, we work closely with an independent company specialising in technical maritime security. The world's largest classification society DNV GL (formerly Germanischer Lloyd, Hamburg) checks and certifies the diving-watch data – including compliance with European diving device standards, which is unique in the watch industry.

I am delighted that you have decided to buy a SINN diving watch and hope that it will continue to give you pleasure for many years to come.

Yours sincerely,

Lothar Schmidt


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SINN SPEZIALUHREN ZU FRANKFURT AM MAIN

It was back in 1961 that pilot and blind-flying instructor Helmut Sinn founded the company. Since then, we have been committed to producing high-specification mechanical watches. In 1994, the graduate engineer Lothar Schmidt took over the company. This marked the beginning of a new era for the SINN brand, because the new owner took a decisive step towards more innovation. Under his leadership, new technologies and materials were introduced, thus providing the crucial incentives for our company's evolution and gradual emergence as an insider's tip for lovers of fine watches. Today, our name stands for technical innovations – much to the delight of both the trade and our customers alike.

Technical innovations

Take, for example, the absolutely condensation-free, anti-reflective, German Submarine Steel diving watch – made possible by HYDRO Technology. Other examples include a chronometer chronograph fashioned from a 22-carat gold alloy that is as hard as stainless steel and a chronometer with a magnetic resistance of up to 80,000 A/m. There are also watches with a clockwork mechanism optimally protected from aging by an inert gas and integrated dehumidifying capsule. The list would not be complete without mentioning the development of mission timers (Einsatzzeitmesser or EZM in German) for firefighters, for special police units and border patrol guards. DIAPAL is one of our most important technological developments, with oiling no longer needed for the most important functions in the watch thanks to the materials we select. This technology was first used in 2001. With the aid of TEGIMENT Technology, we achieve greatly increased scratch resistance through surface hardening.

Ongoing advancement in technology and quality

Our top priority has always been to develop watches that offer superior performance – both in daily and in professional use. Which is why our engineers are working continually to identify which innovative methods, materials and technologies are best suited for optimising our watches. Each new development has to first undergo rigorous practical tests before being incorporated. And no watch leaves our workshops before it has been subjected to thorough checking and fine adjustment by our master watchmakers.

Innovations in endurance testing

The world's largest classification society for maritime safety DNV GL (formerly Germanischer Lloyd, Hamburg), has been testing our diving watches for pressure and water resistance since 2005. As part of DNV GL's official certification process, our diving watches have been treated as part of diving equipment since 2006 and tested and certified in accordance with European diving equipment standards. This is unparalleled in the watch industry. Selected pilot watches are tested and certified by independent institutions according to the DIN 8330 Horology – Aviator watches in an extensive and

complex type and unit verification process. This ensures that a DIN 8330-compliant pilot watch is not only a suitable all-round replacement for the on-board timekeeping instruments available to pilots, but is also capable of remaining unaffected by the physical stresses of flight, posing no risk potential for the crew or aircraft, and demonstrating compatibility with other on-board instruments.

The Temperature Resistance Technology keeps mechanical watches performing at temperatures ranging from −45 °C to +80 °C. This technology has proven its worth in the EZM 10 TESTAF, for example, used as part of the official approvals procedure for Airbus Helicopters (formerly Eurocopter) EC 145 T2 high-performance helicopter. The 303 KRISTALL is impressive proof of the functional reliability of our watches under the toughest climatic conditions. Equipped with Temperature Resistance Technology, the chronograph passed the acid test at the Yukon Quest, the world's most demanding dogsled race. The 203 ARKTIS passed its Arctic endurance test on the wrist of extreme diver Mario M. Weidner, withstanding all dives in the freezing cold waters of the Arctic Ocean above 81 degrees latitude. Both watches were worn on top of protective clothing. The real test was in the extreme temperature fluctuations between water and land – a test that the 303 KRISTALL and the 203 ARKTIS passed with flying colours.

Image: All of the technical details of our watches are documented by tests. This system of assessment has been specially designed for certification of the pressure resistance of our diving watches by DNV GL (formerly Germanischer Lloyd, Hamburg), the world's largest classification society for maritime safety.

Workshop modifications

From the robust case and the polished crystal to the exquisitely decorated movement, we make sure that each and every detail in our watches is fit for purpose. In addition to our technology, the heart of any SINN watch is the fascinating mechanical movement. That is why we rely only on selected renowned manufacturers.

"SZ movements" is the name given to our movement modifications. The results are high-quality calibres characterised by impressive features. An example of this is the SZ04 with regulateur for the 6100 REGULATEUR series.

The model series 140 and EZM 10 uses our proprietary chronograph development, the SZ01. It was modelled on the Lemania 5100 calibre used in the EZM 1. One of the biggest differences between the SZ01 and the Lemania 5100 is the former's stopwatch minute display. This feature now makes it even easier and quicker to record stop times more accurately. This development is based on the Valjoux 7750 calibre. The aim of this modification was to significantly improve the readability of the chronograph function.

The SZ calibres 02, 03, 05 and 06 are a modification of the SZ01 movement, characterized by an off-center 60-minute counter. The 60-minute scale of the stopwatch minute counter is much simpler and more intuitive to read than the 30-minute scale commonly found in other watches.

Image: SINN Calibre SZ01


Sinn

DNV GL CERTIFIES SINN DIVING WATCHES

So what does DNV GL (formerly Germanischer Lloyd) have to do with a watch manufacturer from Frankfurt am Main? The renowned company tests and certifies our diving watches according to a variety of criteria. One test focuses on water resistance and pressure resistance, while a second test procedure covers something never done before in the watchmaking industry: certification in accordance with the European standards for diving equipment!

Testing for water resistance and pressure resistance

In each dive, time plays a crucial role in survival on every dive. Diving watches must therefore be water-resistant, reliable and durable, and guarantee perfect readability in all lighting and water conditions. The information we provide about our diving watches is thus not merely captured in words, but proven in practice as well. Since 2005, DNV GL has been testing our diving watches for water resistance and pressure resistance. In accordance with these certification standards, the U50, EZM 3 and EZM 13 are pressure-resistant to 50 bar, the T1, U1, U212 and the U1000 series are pressure-resistant to 100 bar, while the T2, U2 and U200 series are pressure-resistant to 200 bar and the UX series is actually pressure-resistant to any accessible diving depth. For this series, DNV GL has confirmed the pressure resistance of the case to 12,000 m and of the movement to 5,000 m diving depth. The tests are repeated at regular intervals on all of these watches in order to document the consistency of the quality.

DNV·GL

Test Certificate

No. 56345-18 HH
N141KAAH

This is to certify that at request of the manufacturer, Messrs. Sinn Spezialuhren zu Frankfurt am Main, Wilhelm-Fay-Straße 21, 65936 Frankfurt am Main, a type related

hydraulic pressure test

on 4 diving watches
of type line

Sinn U1

representing the lot
of serial numbers

1010.19001 - 1010.21000

has been performed at March 19th, 2018 with a nominal pressure of 100bar, corresponding to a diving depth of 1000m for a testing time of one hour. Additionally, testing with increased test pressure of 125bar and a testing time of 15 minutes has taken place. The tests have been performed under survey of a duly accredited agent of DNVGL with officially calibrated pressure measuring devices.

There were no watch case deformations noticed. The proper function of the watches has been determined and a subsequent examination has proofed the leak tightness of the tested specimen.

DNV·GL
Hamburg, 2018-06-11

DNV GL has confirmed and certified the pressure resistance.

A premiere: certification in accordance with European diving device standards

In a standardised test situation, will a diving watch deliver the same reliable performance as, say, a breathing apparatus? To answer this question, we were the first who have watches tested and officially certified according to the European standards for diving equipment. Also these tests are performed at regular intervals for all these watches. The testing and certification according to the European standards EN250 and EN14143 was completely new territory for both sides. This was the case because the standards for diving equipment cannot be applied to watches without modification. The experts at DNV GL thus adapted the standards appropriately and defined two series of tests. In the first of the two, they put the timepieces in a test cabinet for three hours at −20 °C, then for three more hours at +50 °C. The timepieces were subsequently checked for accuracy and functional reliability at both temperatures. In a second test, the watches had to withstand three hours at −30 °C and 3 hours at +70 °C with 95 % humidity. The result: Temperature resistance and perfect functioning were documented and certified for the watches in the U1, U1000 (since 2007), U2, U200 (since 2009), T1, T2, U212 (since 2013), EZM 13 (since 2014), U50 (since 2020) and EZM 3 series after both tests. The UX series watches were also certified; however, these were subjected to a modified test involving temperatures between −20 °C and +60 °C due to their battery operation and oil filling.

DNV·GL

Test Certificate

No. 56346-18 HH
N141KAAH

This is to certify that at request of the manufacturer, Messrs. Sinn Spezialuhren zu Frankfurt am Main, Wilhelm-Fay-Straße 31, 65936 Frankfurt am Main, a type related

temperature resistance and functional tests

on 4 diving watches
of type line

Sinn U1

representing the lot
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1010.19001 – 1010.21000

were finalized on May 3rd, 2018. The proper function of the watches has been determined directly after 3 hours conditioning at -30°C and at +70°C and 95% relative humidity, respectively.

Examinations were based on the requirements of the European standards EN250:2014 and EN14143:2003, applied for EU Type-Examination of diving equipment, and performed at the Zentrum für Sicherheitstechnik of the BG Bau in Hürth, Germany.

DNV·GL
Hamburg, 2018-06-11

Dr.-Ing. Stephan Hey

DNV GL has confirmed and certified the type-based test of temperature resistance and functionality in accordance with the European diving device standards EN250:2000 and EN14143:2003.


Steinhart
U1 DE

U1 DE

THE SPECIAL EDITION TO MARK THE 30TH ANNIVERSARY OF GERMAN REUNIFICATION, LIMITED TO 300 PIECES.

Since it was founded, SUG has produced cases for Sinn Spezialuhren, whose requirements in terms of construction and production are extremely demanding. Its cases are a prime example of technological skill and high quality, in particular.

The U1 DE case is made from high-strength German Submarine Steel, which is highly resistant to saltwater and boasts outstanding non-magnetic properties. The diver's bezel with minute ratcheting has a captive connection to the case. The watch comes with an all-over Black Hard Coating, which we use exclusively for surfaces with TEGIMENT technology. It's this combination alone that makes it possible to achieve the high quality of the colour coating.

To mark this special occasion, we've designed the watch in Germany's national colours. The colours black, red and gold, which have always been a symbol of German reunification and are anchored in the constitution as the colours of the flag, go all the way back to the Wars of Liberation (Germany, 1813–1815). The black, red and gold flag appeared in its present-day form at the Hambach Festival of 1832 for the first time. Reunification was celebrated with the raising of a black, red and gold flag in front of the Reichstag building in Berlin.

THE STORY OF A PARTNERSHIP BETWEEN EAST AND WEST

There are statements of historical significance, eternalised in history books and in public consciousness. 'Now what belongs together will grow together' is just such a statement, made by Willy Brandt when the Berlin Wall came down on 9 November 1989. Now a popular saying, this quote provided guidance to many people in the East and West, as the former chancellor had spoken from the heart, calling for everyone to work together to shape the process of reunification. Which isn't as easy as it sounds. People often get stuck in their mindset in their own world.

Working together towards success

Lothar Schmidt and Ronald Boldt didn't have this problem. In fact, they welcomed the idea of 'growing together' and actually put it into practice – also because the ridiculous clichés of know-it-all Western Germans and whinging Eastern Germans never played a role. Looking back, the two of them talk about an exemplary partnership between east and west. There were plenty of setbacks after SUG was founded in 1999. The disastrous flood of 2002 resulted in a complete write-off for the company, which was then forced to start over from scratch. They also weathered the financial crisis of 2008 and the watchmaking crisis of 2016 together. Despite all these trials, they managed to raise SUG to a technical standard that now fulfils the highest demands in terms of technology and quality.

The flood of 2002 was also disastrous for eastern Germany and resulted in a complete write-off for SUG, which had only been established in 1999.
Photo: Stefan Höhnel

Good chemistry from the start

Strictly speaking, the partnership between Lothar Schmidt and Ronald Boldt began in 1998 at a motorway service area, where they got together for the first time to discuss the idea of collaboration. They had good chemistry from the start and there was such a high level of trust between the two that it didn't take them long to decide: 'We'll do it!' There were two factors that made it an easy decision: Ronald Boldt was eager to be self-employed and find a business partner for the new company he was planning to start. And Lothar Schmidt was looking for a new supplier of high-quality cases. The fact that both of them are technically minded further promoted the mutual understanding and trust. The local circumstances in Glashütte were also just right: there weren't any companies that could produce high-quality cases for mechanical movements out of premium materials even in small batches.

A brand in case manufacturing

What followed was nothing short of groundbreaking, as developing a company with a new technological focus from the ground up and without the support of a group or investors was a bold move. SUG is now housed in its own historical company building with cutting-edge workspaces on the 'watch mile' in Glashütte. And it's a case manufacturing brand whose name stands for premium German engineering in the precision engineering sector. Continuity has also been ensured, as son Daniel Boldt has assumed a majority of the management responsibilities at SUG, which he has been a part of in a variety of positions since it was founded.

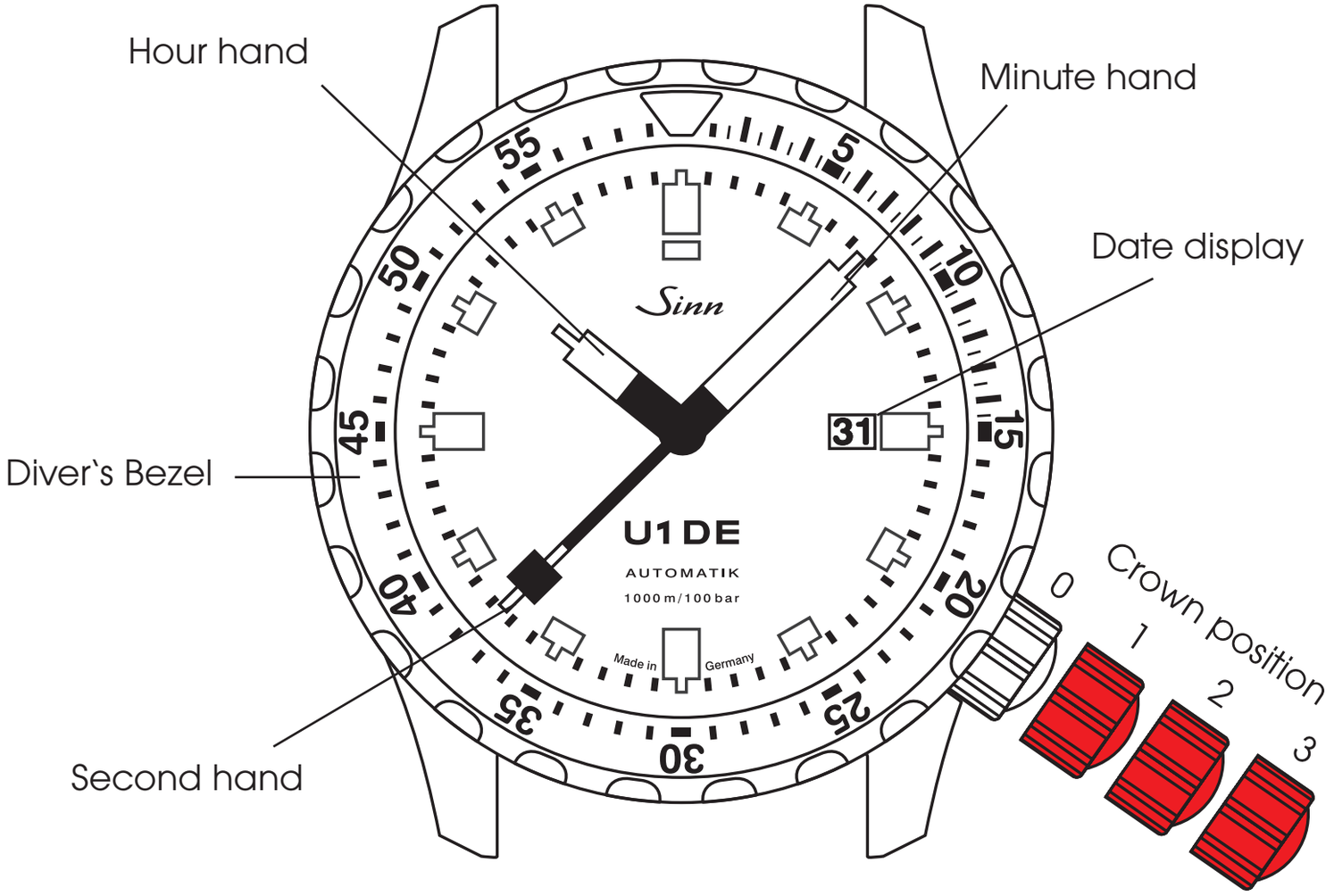
Lothar Schmidt, owner of Sinn Spezialuhren. Working with Ronald Boldt of SUG, he has created an upmarket case manufacturing company.

Milestones in the company's history

For Lothar Schmidt and Ronald Boldt, it was always what they had in common and what united them that allowed them to embrace the concept of growing together. This insight has always been a matter of course from the very beginning and has since become an important milestone in the histories of both companies. Ronald Boldt put it best during his speech for SUG's 20th anniversary: `If ever there were an award presented for an extraordinary East-West partnership, our chances would be very good.'

Two generations of SUG: company founder Ronald Boldt (left) and his son Daniel, who has assumed a majority of the management responsibilities at SUG.

INSTRUCTIONS FOR USE



Winding the watch (crown position 1)
The crown is screwable (crown position 0). To loosen the crown, turn it *counter-clockwise* (crown position 1). The movement is wound by turning the crown *clockwise*. About 40 winds of the crown are generally enough to ensure reliable functionality. Under normal circumstances, simply wearing the watch every day should suffice to keep the self-winding mechanism wound. The power reserve allows you to take off your watch overnight without having to re-wind it.

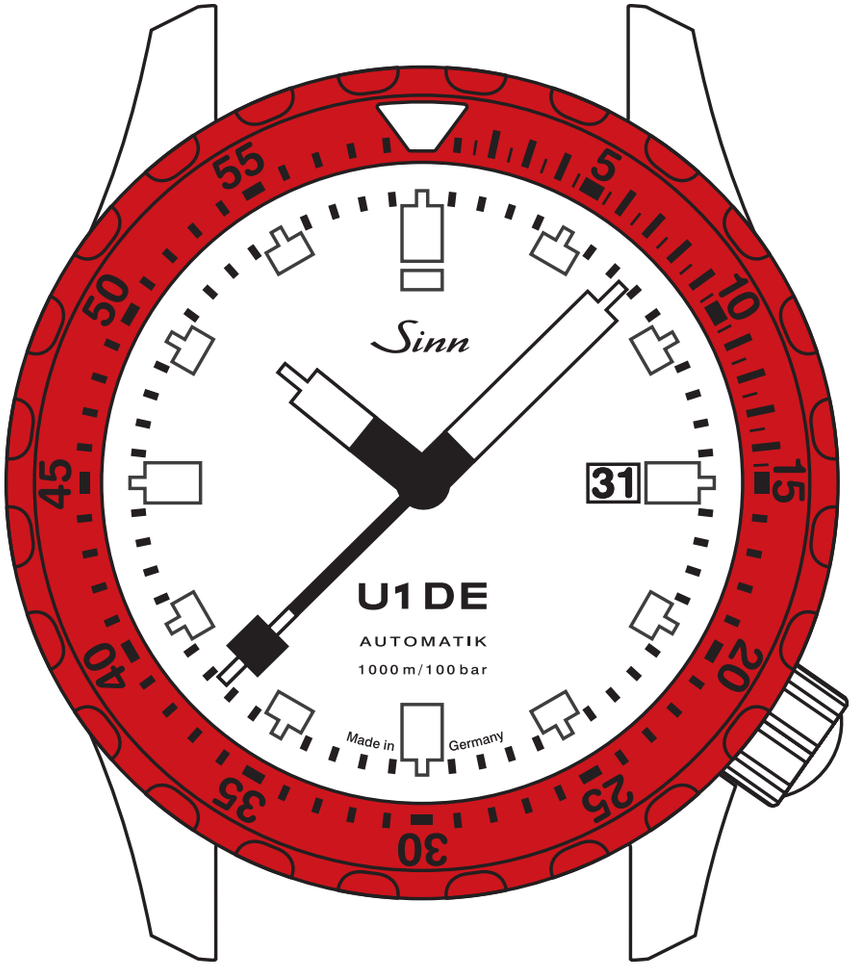
Time adjustment (crown position 3)
In crown position 3, the motion is paused. This helps you to set the watch precisely. Please make sure the date changes at midnight and not at midday. Just move the hands forward until the date changes. Afterwards you attempt to set the time. We recommend moving the hands past the desired minute marker and then adjusting it backwards. The movement restarts as soon as the crown is no longer in position 3.

Quickset date adjustment (crown position 2)
Set the crown in position 2 and turn it *clockwise* until the correct date appears in the date display window.

Please take care to fasten the crown after making adjustments.

USING THE DIVER'S BEZEL TO MEASURE TIME

The diver's bezel is a rotatable bezel that can be set to the minute and only be rotated in one direction to prevent accidental adjustment. It has a luminous main marker which can be used in various ways. It can be used to highlight important time periods. Use it, for example, to mark the start of a period of time; the elapsed time can then be read off at a glance at any time.



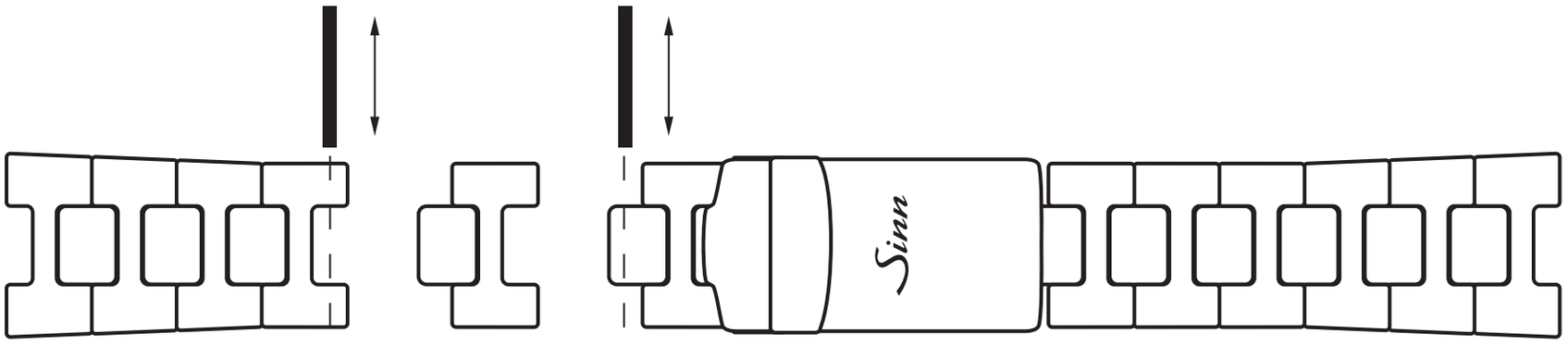
ASSEMBLING AND ADJUSTING OF STRAPS

If you are not sure how to assemble, shorten or lengthen the watch straps, please contact your specialist SINN retailer directly or one of our watchmakers in customer service in Frankfurt am Main. We would also be happy to help you over the telephone.

Adjusting the length of the solid bracelet

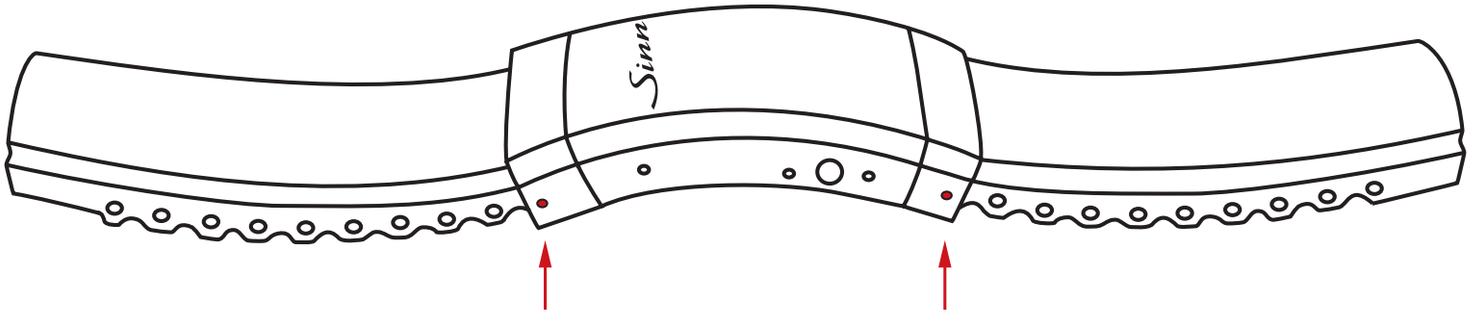
Determine the relative lengths of the two sides before adjusting the length of the bracelet. To ensure maximum comfort, both sides of the bracelet should contain the same number of links. If this is not possible, the top bracelet strap (above the 12 on the clock) should be longer.
It is not necessary to detach the solid bracelet from the watch or the clasp.

1. Loosen the screws on the side of the bracelet link which is to be removed or added.
2. Remove the superfluous bracelet link or insert a new one.
3. Before screwing tight, add a small drop (no more!) of thread-locker (AN 302-42 medium-tight) to the thread of the bracelet screw.

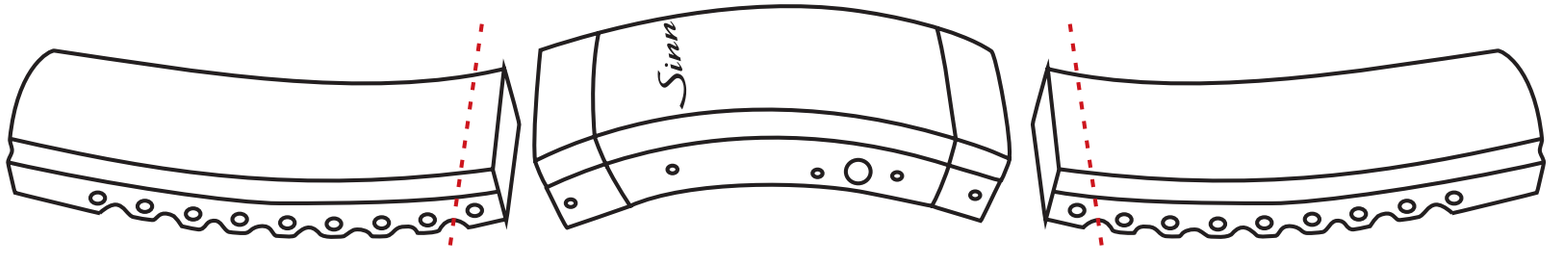


Adjusting the length of the silicone strap

1. Release the silicone band from the clasp. To do so, use the pointed end of the band replacement tool to push the spring bar out of the fastener. The other side of the spring bar can be removed while the fastener is open, enabling you to remove the silicone band.



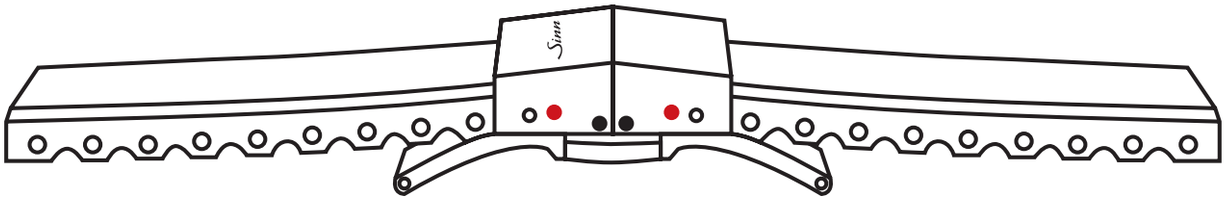
2. Using a knife or scissors, cut the silicone band in the middle between two metal pins. You should shorten the band symmetrically and little by little, starting from the clasp, until you have reached the desired length. Test the length from time to time before proceeding. Shortening both ends by the length of one metal pin results in a total difference of 10 mm in the length of the strap; shortening one end reduces the length by 5 mm.

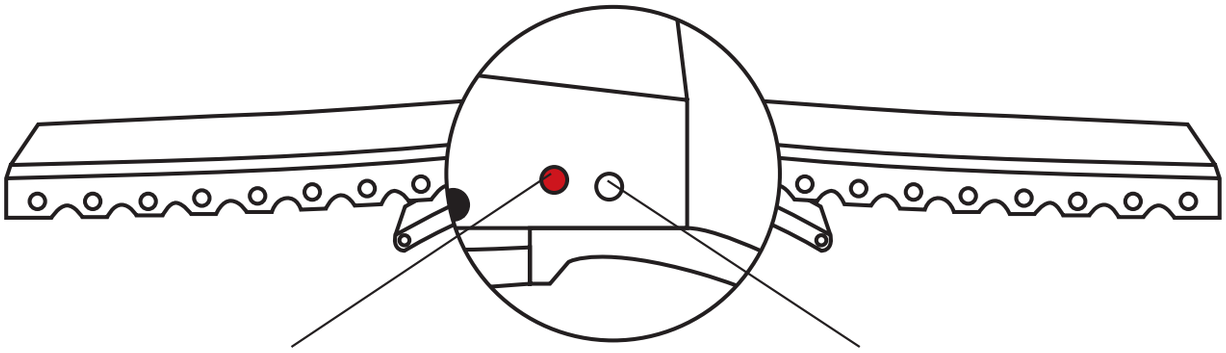


3. Remove the first metal pin and replace it with the spring bar. Then reattach the clasp to the band.

Assembling the butterfly folding clasp as follows

We recommend first inserting the bar at the red marker, as per the illustration. If the silicone strap is too tight, use the option shown in the illustration by the white marker.





Hole for spring bar:
Tight-fitting strap

Hole for spring bar:
Extend strap

If you want to shorten the overall length of the silicone strap, refer to steps 1 to 3 in chapter "Adjusting the length of the silicone strap".

Assembling the textile strap

1. Place your watch on a soft cloth with the dial facing down.
2. Fold over the shorter side of the textile strap with the two metal loops pointing to the left. Then bring the longer side of the textile strap through the spring bars on the left and right, as illustrated in figure 1 (steps A to C).

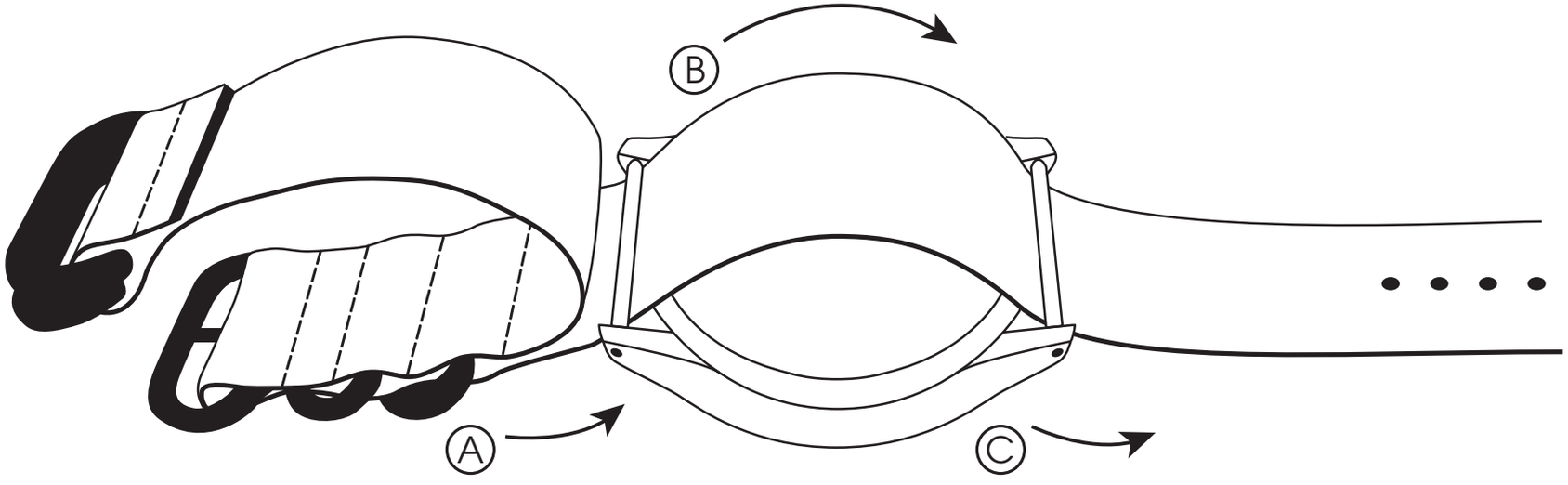


Fig. 1

3. Fold over the shorter side of the textile strap to the right over the case back and bring the longer side through the two metal loops. Tighten the textile strap carefully (figure 2).

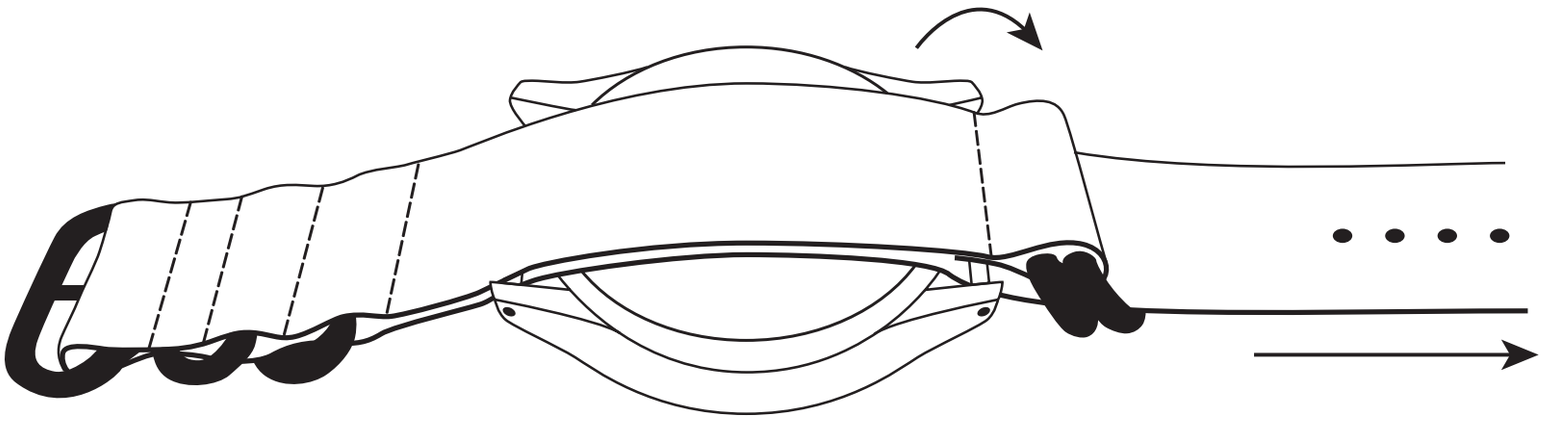


Fig. 2

Luminous design

TECHNICAL DETAILS

Mechanical Movement

- SW 200-1
- Self-winding mechanism
- 26 bearing jewels
- 28,800 semi-oscillations per hour
- Seconds stop function
- Anti-magnetic as per DIN 8309

Tests and Certification

- Tested based on European diving equipment standards EN 250 / EN14143 and certified by DNV GL
- Pressure-resistant up to 1,000 m diving depth (= 100 bar), certified by DNV GL
- According to the technical demands for the diving norm DIN 8306
- Meet the technical requirements for waterproofness, as set out in standard DIN 8310
- Low pressure resistant

Functions

- Hours, minutes, seconds
- Date display
- Diver's bezel with minute ratcheting and luminous key mark

Case

- German Submarine Steel
- Black Hard Coating on a TEGIMENT Technology basis
- Crown screwable
- Sapphire crystal glass in front, anti-reflective on both sides
- Case back screw-fastened
- Captive bezel
- Case diameter 44 mm
- Band lug width 22 mm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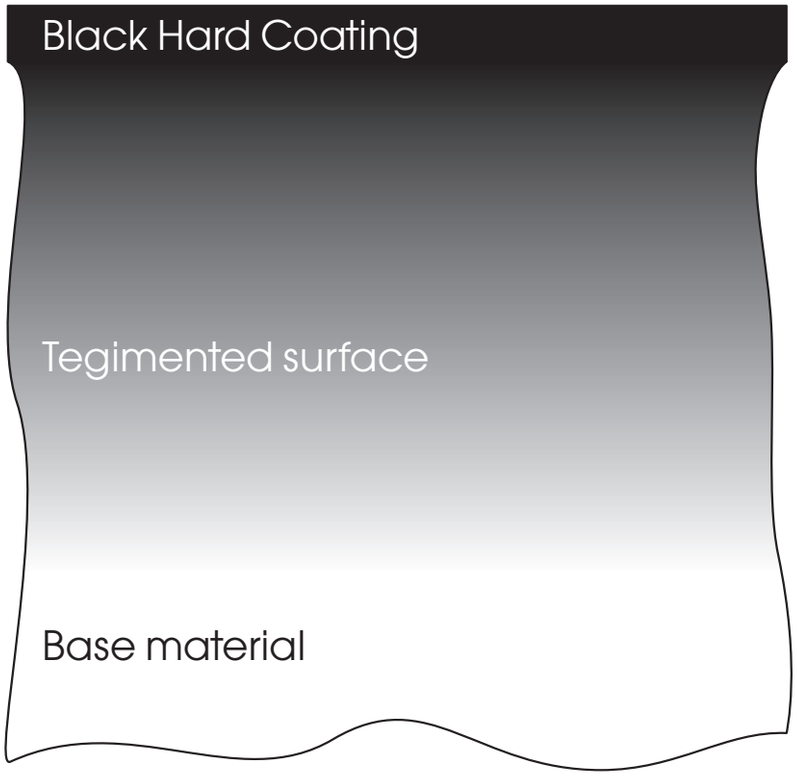
TEGIMENT Technology and the Black Hard Coating

With the aid of TEGIMENT Technology, we achieve greatly increased scratch resistance through surface hardening. TEGIMENT Technology increases the level of hardness of the base material, such as submarine steel, many times over. To achieve this, we do not apply any coating. The material itself is hardened in the surface area. The hardened surface is far better protected against scratching than the surface of the base material. The tempering with the TEGIMENT Technology forms the basis for the application of the Black Hard Coating – a high quality PVD coating.



Schematic diagram showing the hard coating on a surface hardened with TEGIMENT Technology.

ADVICE

Water resistance

In its original condition, your watch fulfils the technical requirements of water resistance according to DIN 8310. The static compressive stress of your watch is given in bar. Each and every one of our watches is tested for water resistance. However, in everyday use it is important to note that seals can suffer from wear and ageing over time due to a wide range of factors which arise when wearing a wristwatch. We therefore recommend having the water resistance checked at least once a year. To ensure your watch retains its water resistance for as long as possible, rinse it with tap water if it comes into contact with seawater, chemicals or the like. Continual mechanical stress in the form of shocks and vibrations can also not only reduce water resistance, but also increase wear and tear of the movement. Care should therefore be taken to protect your watch from unnecessary impacts.

Accuracy

The measured results of the watch's rate are always "snapshots" taken under laboratory conditions. For this reason, we also take each owner's individual movements into account when making a specific regulator correction. It is therefore only possible to judge the accuracy of your watch after it has been in operation for approximately eight weeks. In the event of a deviation, please keep a daily record of its timekeeping over an extended period, for example one week.

Do you have any questions? Our employees will be pleased to advise you.

Telephone: + 49 (0)69/97 84 14-400
Telefax: + 49 (0)69/97 84 14-401
E-mail: service@sinn.de

SERVICE

Does your SINN watch need an inspection, repair, retrofitting or reconditioning?
If possible, please use our service order form. For information about our service order form, please refer to the section entitled "Customer Service" on our website www.sinn.de/en and to the section entitled "Servicing and repairs" in our general terms and conditions at www.sinn.de/en. We would be happy to send you a copy of the general terms and conditions.

Our international partners generally offer on-site service. However, should they be unable to provide a certain service, they will organise the safe dispatch and return of the SINN watch to our manufactory in Germany. Please be aware that our partners will wait until they have a sufficient number of SINN watches before they post a shipment, in order to keep transport costs and customs duties to a minimum. This will increase the processing time.

Alternatively, you can send your SINN watch to us directly. You will be required to cover the postage costs for the delivery and return shipment, which vary depending on the country. For insurance reasons, we strongly recommend sending us any return goods by registered parcel post. We regret that we are unable to accept deliveries with unpaid postage!

In case you have a chance to drop off your watch directly at our office in Frankfurt am Main we look forward to your visit. Please make a note of our opening times.

For information about our service, please refer to the section entitled "Customer Service" on our website www.sinn.de/en or +49 (0)69 / 97 84 14-400.

Sinn

Spezialuhren zu Frankfurt am Main

1. Auflage / 1st Edition
09 2020
Technische Änderungen vorbehalten.
Technical specifications are subject to changes.