



SERIES 243



*Sinn*


SPESIALUHREN ZU FRANKFURT AM MAIN





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## DEAR CUSTOMER,

We know from numerous conversations that the people who buy our watches do so out of conviction. This includes people with a pronounced affinity to technology who are fascinated, for example, by the solutions we have devised for protection from magnetic fields and scratch resistance. Some of our customers, such as divers, pilots and the German GSG 9 special police unit, rely on their watches in their respective careers because their lives depend on it.

They all swear by the performance, resilience and durability, as well as the quality and precision of our watches. That is why the world's largest classification society DNV GL (formerly Germanischer Lloyd, Hamburg) regularly tests and certifies the water and pressure resistance of our diving watches.

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 a suitable all-round replacement for the on-board timekeeping instruments available to pilots. Functionality is our top priority and ultimately determines the design. Only the technical features that are really needed can be found on our watches. Because we believe that products have to speak for themselves.

The basic question that we ask ourselves is: which innovative technologies and materials can be employed for our craft and provide solutions for rendering our watches even more practical 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. We repeatedly go to the limits of physical resources to upgrade our watches – with the aim of making what’s good even better. Most of our best developments are yet to come!

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

Yours sincerely,

A handwritten signature in black ink, appearing to read 'L. Schmidt', with a stylized flourish at the end.

Lothar Schmidt



*Sinn*

ENGINEERING OF TECHNOLOGY ON MAIN

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AN DER UNIVERSITÄT WÜRZBURG

## 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  $-45^{\circ}\text{C}$  to  $+80^{\circ}\text{C}$ . 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 CRYSTAL 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 ARCTIC 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 CRYSTAL and the 203 ARCTIC 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 EZM 1.1 and 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 and 05 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.





## SERIES 243 Ti

**Our ladies' watches are the perfect synthesis of aesthetics and suitability for everyday use, made using sophisticated design and contemporary technology. This is also showcased by the watches in the 243 series.**

Their overall appearance has been deliberately kept simple; they convey elegance and feminine appeal even at first glance. The rectangular case made from high-gloss, warmly gleaming, polished titanium is finished with first-class sapphire crystal glass. The appliqués on the dial are set by hand with plenty of attention to detail.

This appealing combination of masterful watchmaking and features suitable for everyday use, such as pressure resistance and low-pressure resistance, make this sophisticated piece of jewellery one for any occasion.

Image:

**243 Ti M** with mocha-brown galvanized dial and leather strap with alligator embossing.



Luminous

# TECHNICAL DETAILS

243 Ti

## Mechanical Movement

- Calibre ETA 2671
- Self-winding mechanism
- Hand adjustment with stop-second function
- 25 bearing jewels
- 28,800 semi-oscillations per hour
- Shock resistant as per DIN ISO 1413
- Anti-magnetic as per DIN 8309

## Functions

- Hours, minutes, seconds
- Date display

## Watch Case

- Titanium, polished
- Sapphire crystal glass
- Meet the technical requirements for water resistance, as set out in standard DIN 8310
- Water- and pressure resistant up to 10 bar
- Low pressure resistant
- Band lug width 14 mm
- Case 22,5 x 29,5 mm

## Dial

### 243 Ti A

- Charcoal grey electroplated
- Matt finished

### 243 Ti K

- Copper electroplated
- Guilloché decoration

### 243 Ti M

- Mocha-brown electroplated
- Sunburst decoration

### 243 Ti Perlmutter W

- Mother-of-pearl, white

### 243 Ti S

- Black electroplated
- Sunburst decoration





## MODEL 243 Ti Z S

**The polished decorative ring is an exclusive feature of the 243 Ti Z S. We make it out of zirconium oxide, a special high-performance ceramic.**

The material is non-metallic and inorganic. The manufacturing process alone – from a fine powder to the finished ceramic – is very elaborate. In this, a technical process called sintering is first carried out, where the powder particles are combined at high temperatures. This process is supplemented with a "hot-isostatic-pressing" procedure, in which extreme structural density is achieved under high pressure. The result is impressive. The decorative ring glows with a warm, dark and deep lustre. It has proven very robust in practice: it is not prone to breakage and has a very high resistance to scratches.

The 243 Ti Z S is thus a successful synthesis of cutting-edge, technical materials processing and the traditional watchmaker's craft.

Image:

**243 Ti Z S** with fine link bracelet made from titanium.



Luminous

# TECHNICAL DETAILS

243 Ti Z S

## Mechanical Movement

- Calibre ETA 2671
- Self-winding mechanism
- Hand adjustment with stop-second function
- 25 bearing jewels
- 28,800 semi-oscillations per hour
- Shock resistant as per DIN ISO 1413
- Anti-magnetic as per DIN 8309

## Functions

- Hours, minutes, seconds
- Date display

## Watch Case

- Decorative bezel of zirconium oxide
- Titanium, polished
- Sapphire crystal glass
- Meet the technical requirements for water resistance, as set out in standard DIN 8310
- Water- and pressure resistant up to 10 bar
- Low pressure resistant
- Band lug width 14 mm
- Case 22,5 x 29,5 mm

## Dial

- Black electroplated
- Sunburst decoration



## SERIES 243 TW66 WG

**Classic design for an elegant, feminine look: these are the timelessly beautiful ladies' watches of the 243 TW66 series.**

As an unusual touch of ornamental finesse, the dial of the ladies' watches is surrounded by a superior decorative ring of 18 ct white gold with 66 precious diamonds in Top Wesselton quality. The rhodium-plated appliqués of the exquisitely decorated dial are set by hand with plenty of attention to detail. And the rectangular case made from high-gloss, warmly gleaming, polished titanium is finished with first-class sapphire crystal glass. Masterful watchmaking and characteristics suitable for everyday use, such as pressure resistance and low-pressure resistance, are all hallmarks of this fine piece of jewellery.

Image:

**243 TW66 WG Mother-of-pearl W** with fine link bracelet made from titanium.



Luminous

# TECHNICAL DETAILS

243 TW66 WG

## Mechanical Movement

- Calibre ETA 2671
- Self-winding mechanism
- Hand adjustment with stop-second function
- 25 bearing jewels
- 28,800 semi-oscillations per hour
- Shock resistant as per DIN ISO 1413
- Anti-magnetic as per DIN 8309

## Functions

- Hours, minutes, seconds
- Date display

## Watch Case

- Decorative bezel of 18-carat white gold
- Decorative bezel with 66 diamonds
- Titanium, polished
- Sapphire crystal glass
- Meet the technical requirements for water resistance, as set out in standard DIN 8310
- Water- and pressure resistant up to 10 bar
- Low pressure resistant
- Band lug width 14 mm
- Case 22,5 x 29,5 mm

## Dial

### 243 TW66 WG A

- Charcoal grey electroplated
- Matt finished

### 243 TW66 WG K

- Copper electroplated
- Guilloché decoration

### 243 TW66 WG M

- Mocha-brown electroplated
- Sunburst decoration

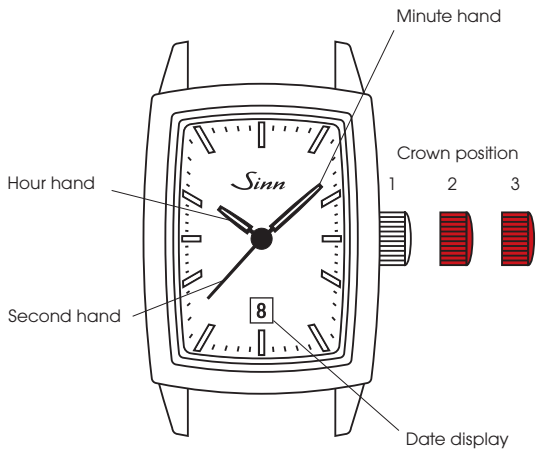
### 243 TW66 WG Perlmutter W

- Mother-of-pearl, white

### 243 TW66 WG S

- Black electroplated
- Sunburst decoration

# INSTRUCTIONS FOR USE





### **Winding the watch (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.

## ADJUSTING THE LENGTH OF THE WATCH STRAPS

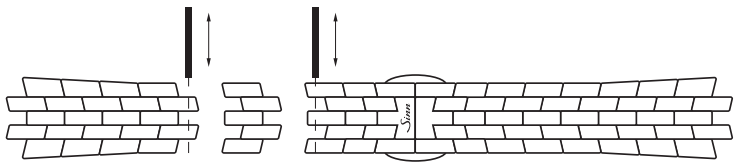
If you don't know how to shorten or lengthen the solid bracelet, please contact your SINN dealer or the watchmakers in our customer service department in Frankfurt am Main. Our customer service employees are also happy to help you over the telephone.

### **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.





# 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)69 978 414 400

Telefax: + 49 (0)69 978 414 401

E-mail: [service@sinn.de](mailto: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](http://www.sinn.de/en) and to the section entitled "Servicing and repairs" in our general terms and conditions at [www.sinn.de/en](http://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](http://www.sinn.de/en) or +49 (0)69 / 97 84 14-400.**

# Sinn

SPEZIALUHREN ZU FRANKFURT AM MAIN

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Technische Änderungen vorbehalten.  
Technical specifications are subject to changes.



