THE 2023/2024 CATALOGUE





Vorwort

kennen Sie CuSn7Au12,5?

Nein?

Dies ist eine einzigartige und von uns entwickelte Bronzelegierung, die wir als GOLDBRONZE 125 bezeichnen und die in unserem neuen, limitierten Modell T50 GOLDBRONZE und der T50 GBDR (Seiten 66 bis 69) Anwendung findet. Zu den klassischen Bronze- Metallen Kupfer (Cu) und Zinn (Sn) haben wir Gold (Au) legiert. Alle weiteren Metalle, die in den üblichen Bronzelegierungen als Zusätze oder Verschmutzung vorkommen, haben wir bis unter die Nachweisgrenze von 0.002% vermieden.

Aus diesem extrem hohen Reinheitsgrad ergibt sich u.a. eine erhöhte Korrosionsbeständigkeit gegen Seewasser und eine weit verbesserte, sehr gute Hautverträglichkeit.

Abgesehen von allen technischen Besonderheiten erstrahlt diese Uhr auch in einem einzigartigen, unverwechselbaren und wunderschönen Bronzeton. Freuen Sie sich auch auf folgende Uhrenneuheiten:

- Modell T50, eine Taucheruhr aus Titan mit unverlierbarem, tegimentiertem Sicherheitsdrehring (Seite 141) und mattschwarzem Zifferblatt (Seiten 70 und 71),
- Modell U50 DS, eine auf 1.000 Stück limitierte, volltegimentierte Taucheruhr aus deutschem U-Boot-Stahl mit Dekorschliff- Zifferblatt und einem unverlierbaren Drehring (Seiten 80 und 81),
- Modell U1 S Perlmutt S, eine auf 300 Stück limitierte Taucheruhr aus deutschem U-Boot-Stahl mit Perlmutt-Zifferblatt.
 Die Taucheruhr besitzt eine schwarze Hartstoffbeschichtung auf tegimentiertem Untergrund sowie einen unverlierbaren Drehring (Seiten 72 und 73).

Achten Sie auf die Kennzeichnung "NEU" im Inhaltsverzeichnis.

Ich wünsche Ihnen viel Freude bei der Lektüre dieses Katalogbuches!

Foreword

Dear Watch Lovers.

Are you familiar with CuSn7Au12.5? No?

It's a unique bronze alloy developed in-house, which we refer to as GOLDBRONZE 125 and which is used in our new, limited T50 GOLDBRONZE model and the T50 GBDR (pages 66 to 69). We have alloyed gold (Au) with the traditional bronze metals copper (Cu) and tin (Sn) and have minimised all other metals that occur in conventional bronze alloys as additives or contaminants to below the detection limit of 0.002%.

This extremely high level of purity increases corrosion resistance in the presence of seawater and significantly improves skin tolerance.

In addition to all of its extraordinary technical details, this watch also boasts a unique, unmistakable and beautiful bronze tone.

You can also look forward to the following new watches:

- the T50 model, a diving watch made from titanium with Captive Safety Bezel on a TEGIMENT Technology basis (page 141) and matt-black dial (pages 70 and 71)
- the U50 DS model, a diving watch made from German Submarine Steel on a 100% TEGIMENT Technology basis, with intricately finished dial and a captive rotating bezel, limited to 1,000 pieces (pages 80 and 81)
- the U1 S Mother-of-Pearl S model, a diving watch made from German Submarine Steel with mother-of-pearl dial, limited to 300 pieces. This diving watch features a case made with Black Hard Coating on a TEGIMENT Technology basis and a captive rotating bezel (pages 72 and 73).

Watch out for the word 'NEW' in the contents.

I hope you enjoy reading our catalogue.

L. Sec. dx

Contents

4-53	Instrumental watches and chronographs	86-109	Classic masterpieces and Financial District Watches
6-7	Series 103	88-89	Model 1739 Ag B
8-13	Series 104	90-91	1736 St 4N, 1739 St 4N and 1739 St S
14-15	Series 105	92-93	Model 1736 Classik and Series 1746
16-19	Series 140	94-95	Model 1746 Heimat
20-21	Series 144	96-97	Series 6000 and 6099
22-23	Series 240	98-99	Model 6012
24-25	Series 356	100-101	Model 6052
26-29	Series 358	102-103	Models 6060/6060 B/6096
30-33	Series 556	104-105	Models 6068 and 6068 B
34-35	Model 717	106-109	Model 6200 WG Meisterbund I
36-37	Model 836		
38-41	Series 856	110-119	Ladies' watches
42-43	Series 857	112-117	Series 434
44-45	Series 900	118-119	Series 456
46-47	Model 910 SRS	120-155	Reports, technologies and mission timers
48-49	Model 936	122-123	Frankfurt am Main – Hometown of Sinn Spezialuhren:
50-53	Model HUNTING WATCH 3006		Company headquarters in Sossenheim -
54.05	Markey Markey and district according		Branch in Römerberg square
54-85	Mission timers and diving watches	124-127	Sächsische Uhrentechnologie GmbH (SUG) Glashütte
56-57 58-63	Models EZM13.1/EZM3F/EZM3 Model EZM 12	128-129	The current design awards
	Series 206	130-131	High-quality mechanical movements
64-65 66-71	Series T50 NEW	132-133	Ar-Dehumidifying Technology
72-77	Series ID NEW	134	DIAPAL
78-79	Series U2 (EZM 5)	135	HYDRO
80-81	Series U2 (EZIVI 5) Series U50 NEW	136-137	Magnetic Field Protection and [Q] Technology
82-83		138-139	Temperature Resistance Technology
84-85	Model U212 (EZM 16)	140	TEGIMENT
04-03	Series UX (EZM 2B)	140	The Black Hard Coating
		141	Captive Safety Bezel
		142-143	The DIN 8330 for pilot watches
		144-145	DNV certified SINN diving watches
		146-151	Mission timers
		152-155	How a NaBo 17 ZM survived a Tornado crash
		156	Warranty statement and catalogue imprint



Instrument Watches and Chronographs
These watches are modelled on our very first navigation cockpit clocks and continue to maintain the high

standards expected of such timepieces: optimum readability, maximum precision, absolute reliability.





103 St - black textile strap. Case made of stainless steel, polished and acrylic glass. Two-year guarantee, see page 156. (Case diameter: 41 mm)



103 St Sa – expandable stainless steel bracelet.
Case made of stainless steel, polished and sapphire crystal glass.
Two-year guarantee, see page 156.



103 St DIAPAL – case made of polished stainless steel. Fine-link bracelet with a butterfly folding clasp. Five-year guarantee, see page 156. (Case diameter: 41 mm)



103 Ti DIAPAL - blue silicone strap. Case made of titanium. Five-year guarantee, see page 156. (Case diameter: 41 mm)

(Case diameter: 41 mm)

The traditional pilot chronograph

- Case made of stainless steel, polished
- Waterproof and pressure-resistant to 20 bar
- Resistant to low pressure
- 103 St DIAPAL (also available in titanium):
- DIAPAL the lubricant-free anchor escapement
- Column wheel chronograph, exquisitley decorated
- Ar-Dehumidifying Technology enhances functional reliability and freedom from fogging
- Functionally reliable from -45°C up to +80°C
- Second time zone on 12-hour basis
- Crystal and transparent case back made of sapphire crystal glass
- Captive pilot's bezel with minute ratcheting

• 103 Ti Ar:

- Ar-Dehumidifying Technology enhances functional reliability and freedom from fogging
- Case made of pure titanium, bead-blasted
- Crystal and transparent case back made of sapphire crystal glass

• 103 St Sa:

- Ar-Dehumidifying Technology optional
- Crystal and transparent case back made of sapphire crystal glass
- Captive pilot's bezel with minute ratcheting

· 103 St:

- Shockproof acrylic glass (sapphire crystal glass optional)





104 St Sa I MG - sand-coloured canvas leather strap. Shimmering metallic-green dial. Two-year guarantee, see page 156. (Case diameter: 41 mm)



104 St Sa I – cowhide strap with alligator embossing and contrasting stitching. Two-year guarantee, see page 156. (Case diameter: 41 mm)



104 St Sa I – black silicone strap with toothed buckle. Two-year guarantee, see page 156. (Case diameter: 41 mm)



104 St Sa I MG - luminous design.



Back view of the 104 St Sa I MG.

Series 104 St Sa I The classic pilot watch

Available with two different dial colours, these timepieces look like classic pilot watches – partly because their design follows SINN's long-standing traditional style. Their clear, structured appearance ensures optimum readability. The watches feature a polished stainless-steel case, as well as a crystal and glass back made of sapphire crystal to allow the accuracy of the mechanical movement to be admired in detail. The pilot's bezel with minute ratcheting can be rotated on both sides and is securely attached to the case.

- Case made of stainless steel, polished
- Captive pilot's bezel with minute ratcheting
- Sapphire crystal glass
- Transparent case back made of sapphire crystal glass
- Waterproof and pressure-resistant to 20 bar
- Resistant to low pressure
- 104 St Sa I MG:
 - Shimmering metallic-green dial
- · 104 St Sa I
 - Matt black dial





104 St Sa I B – blue leather strap. Two-year guarantee, see page 156. (Case diameter: 41 mm)



104 St Sa I A – fine grey Alcantara* strap. Two-year guarantee, see page 156. (Case diameter: 41 mm)



104 St Sa I W – fine-link bracelet with a butterfly folding clasp.
Two-year guarantee, see page 156.
(Case diameter: 41 mm)

104 St Sa I B - luminous design.

E Sine

Back view of the 104 St Sa I B.

Series 104 St Sa I The classic pilot watch

With a choice of three different dials, these timepieces are classic pilot watches offering optimum readability. The watches display the date and day of the week. They also feature a pilot's bezel with minute ratcheting, which can be rotated on both sides and is securely attached to the case. The crystal made of sapphire crystal is set in a polished stainless-steel case. The glass back is also made of sapphire crystal, allowing the mechanical movement to be admired in all its intricacy. Model 104 St Sa I A received the German Design Award in the category 'Excellent Product Design 2021' for its outstanding design.

- Case made of stainless steel, polished
- Captive pilot's bezel with minute ratcheting
- Sapphire crystal glass
- Transparent case back made of sapphire crystal glass
- Waterproof and pressure-resistant to 20 bar
- · 104 St Sa I W:
 - White glossy dial
- 104 St Sa I A:
- Anthracite electroplated dial with sunburst decoration
- 104 St Sa I B:
 - Dark-blue dial with sunburst decoration

^{*}Alcantara is a registered trademark of Alcantara S.p.A.





104 St Sa A - grey canvas leather strap. Two-year guarantee, see page 156. (Case diameter: 41 mm)



104 St Sa A - solid stainless steel bracelet. Two-year guarantee, see page 156. (Case diameter: 41 mm)



104 St Sa A - black silicone strap with integrated case. Two-year guarantee, see page 156. (Case diameter: 41 mm)



104 St Sa A - Iuminous design.



Back view of the 104 St Sa A.

Large picture:

104 St Sa A - case made of polished stainless steel. Fine-link bracelet with a butterfly folding clasp. Two-year guarantee, see page 156. (Case diameter: 41 mm)

Series 104 St Sa A

The classic pilot watch

Virtually perfect readability is also guaranteed by the series with the Arabic numerals set against a matt black dial. Optimum lucidity of the day, day of the week and time is ensured by the clearly structured design. A special feature is the captive pilot's bezel with minute ratcheting, which can be rotated on both sides. The crystal made of sapphire crystal is set in a polished stainless-steel case. The glass back is also made of sapphire crystal, allowing the delicate work of the mechanical movement to be admired in all its intricacy.

- Case made of stainless steel, polished
- Matt black dial
- Captive pilot's bezel with minute ratcheting
- Sapphire crystal glass
- Transparent case back made of sapphire crystal glass
- Resistant to low pressure
- Waterproof and pressure-resistant to 20 bar





105 St Sa W - black cowhide leather strap with contrasting stitching.
Two-year guarantee, see page 156.
(Case diameter: 41 mm)



105 St Sa UTC - black textile strap. Two-year guarantee, see page 156. (Case diameter: 41 mm)

105 St Sa UTC W – solid stainless-steel bracelet. Two-year guarantee, see page 156. (Case diameter: 41 mm)



105 St Sa – solid stainless-steel bracelet. Two-year guarantee, see page 156. (Case diameter: 41 mm)

Series 105 St Sa

Sporty watches with multifunctional rotating bezel.

- Case made of stainless steel, bead-blasted
- Sapphire crystal glass
- Transparent case back made of sapphire crystal glass
- Waterproof and pressure-resistant to 20 bar
- Low pressure resistant

• 105 St Sa:

- Captive multifunctional rotating bezel with minute ratcheting and Black Hard Coating on a TEGIMENT Technology basis
- Second time zone on a 12-hour basis

· 105 St Sq UTC:

- Captive rotating bezel with 24-hour ratcheting and Black Hard Coating on a TEGIMENT Technology basis
- Second time zone on a 24-hour basis

· 105 St Sa and 105 St Sa UTC:

- Matt black dial
- 105 St Sa W and 105 St Sa UTC W:
 - Matt white dial





140 St S - solid, expandable bracelet. Case made of stainless steel with a Black Hard Coating. Three-year guarantee, see page 156. (Case diameter: 44 mm)



140 St - case made of bead-blasted stainless steel. Solid, expandable bracelet. Three-year guarantee, see page 156. (Case diameter: 44 mm)



140 St S - black cowhide strap. Case made of stainless steel with a Black Hard Coating. Three-year guarantee, see page 156. (Case diameter: 44 mm)



Back view of the 140 St S.



140 St S – case with a Black Hard Coating on a TEGIMENT Technology basis.



140 St - bead-blasted case.

The space chronograph

We have subjected the 140 model series to further technical development. It incorporates the SINN SZ01 chronograph movement. The most striking feature of the design is the centre-mounted jump 60-minute stop hand.

- SINN chronograph movement SZ01
- Centre-mounted 60-minute stopwatch hand
- Case made of stainless steel, bead-blasted
- Case made with TEGIMENT Technology and therefore especially scratch-resistant
- Nickel-free case back without TEGIMENT Technology
- Ar-Dehumidifying Technology enhances functional reliability and freedom from fogging
- Sapphire crystal glass
- Interior pilot's bezel
- Waterproof and pressure-resistant to 10 bar
- Resistant to low pressure

· 140 St S:

- Case with a Black Hard Coating on a TEGIMENT Technology basis

Fascination of space travel

Astronaut scientist Dr Ernst Messerschmid on the D1 Spacelab Mission

Even people who have never orbited like a real astronaut are fascinated by the idea of space flight. The aerospace industry has already created a multitude of benefits in telecommunication, navigation, earth observation, space research and many other technological fields. But the biggest benefit may be the fact that more and more people are beginning to see our world the way astronauts do – as a small, beautiful planet, an island in the vast and unfriendly reaches of the galaxy with only a limited amount of space for its inhabitants who live in constant conflict with Mother Nature.



From the early beginnings of space flight to today, only a few people have enjoyed the privilege of actually going there. The first Europeans received the opportunity to live and work in space as "astronaut scientists" with the development of the Spacelab system, which began immediately following the successful Apollo missions of the USA in the early 1970s. This was Europe's first access to manned space flight. Just two years after Ulf Merbold participated in the first joint NASA and ESA Spacelab mission, Reinhard Furrer and I were selected to orbit the earth for a week and conduct some 100 scientific experiments as part of the DI German Spacelab mission.

When Reinhard Furrer and I – both of us were physicists – began our astronaut training in early 1983, we were breaking new ground at the German Aerospace Centre, at NASA and in the public's perception. Previously there had been only American astronauts and Russian cosmonauts, and most of them were test pilots, a few were engineers, but hardly any were scientists. Up until then, science had taken a back seat – at least, it was not considered particularly important to the struggles the two superpowers were engaged in, both on earth and in space.

When the Europeans expressed interest in participating in the development of the American space shuttle in the 1970s, they were initially given the cold shoulder. All that was offered to them was a small module considered by many to be of little importance, which the shuttle could also have flown without – namely the Spacelab, built by European engineers, most of them Germans. If we had not hailed from the country of Hermann Oberth, Werner von Braun and other important pioneers of space flight, we would have had even more trouble being accepted by our more powerful partners.

The goal of the D1 Spacelab Mission STS-61A, which lasted from 30 October to 6 November 1985, was to conduct a variety of scientific experiments in diverse fields, e.g. fluid physics, materials research, process engineering, medicine and biology. The experiments were designed to be conducted in microgravity, so they could only be carried out in the weightlessness of space. Previously unexplored effects on fluid-mechanic interfaces and solidification responses were investigated, and chemical reactions in the various objects under investigation were analysed, including the effects of weightlessness on the human body and the behaviour of various materials, such as liquids, alloys, composites and crystals.



Astronaut scientist Dr Ernst Messerschmid and Dr Reinhard Furrer (see picture to the right) were crew members on the first German Spacelab Mission D1 and received the Federal Service Cross First Class.



Shortly before the D1 mission, Prof. Reinhard Furrer bought his SINN model 140 S and used it to prove primarily that automatic watches can be wound through movement even under weightless conditions. Furrer died during an air show in Berlin on 9 September 1995.

On the D1 mission in 1985, we had atomic clocks on board in order to better understand the fundamentals for subsequent, satellite-supported navigation systems such as GPS and the European Galileo satellite system. Also on board was my colleague Reinhard Furrer, who had previously piloted one-engine planes across the Atlantic. During this time, he had become acquainted with chronographs and astronavigation, which at least explains why he took his chronograph with him on the space flight. It was a SINN 140 S chronograph, an automatic watch that performed flawlessly in space. I left my own chronograph at home, where it was promptly stolen from my home during my extraplanetary journey. Reinhard Furrer's attachment to this seemingly outdated technology was not just emotional - and after all, who wouldn't want to

take along the useful tools they have come to love when setting out on an expedition? In addition to this understandable motivation, he knew that these chronographs provide reliable service in various situations pilots often face, where they must take action in real time, under stress, and can't afford to make any mistakes (Apollo 13: "Failure is not an option"). They have also been technically improved upon and increasingly also fulfil operational and aesthetic needs in ways that would not be possible with the kind of technical progress that sometimes results from basic research conducted as part of the space programme.

Prof. Ernst Messerschmid

fruit Maranlie

Ernst Messerschmid was born in Reutlingen in 1945. After studying physics in Tübingen and Bonn and earning his doctorate, he joined the German Aerospace Centre (Deutsche Forschungsanstalt für Luft- und Raumfahrt, DLR) in Oberpfaffenhofen in 1978. In 1983, Messerschmid was named an astronaut scientist, and he flew aboard the American space shuttle Challenger in 1985 on the week-long D1 Spacelab mission. In 1986, he was given a full professorship and appointed director of the Institute for Aerospace Systems at the University of Stuttgart, where he also served as dean of the aerospace technology faculty from 1990 to 1992 and pro-rector for research and technology from 1996 to 1998. From 2000 to 2005, he took a leave of absence from the University of Stuttgart to serve as head of the European astronaut centre of the European Space Agency in Cologne. While there, his responsibilities included selecting and training European astronauts for missions on board the International Space Station, ISS. His current research focuses on developing future space stations as well as strategies and scenarios for space missions to the moon, nearby asteroids and Mars.

Major publications and awards:

Messerschmid has published more than 150 scientific papers, authored or co-authored ten books and holds German and European patents. He has received the Federal Service Cross First Class, the medal of honour of the state of Baden-Württemberg, the NASA Space Flight Medal and Hermann Oberth Medal in Gold. He is also a member of the German Academy for Sciences Leopoldina, the German Academy of Engineering Sciences and the International Academy of Astronautics, among other organisations.





144 St DIAPAL – black cowhide strap. Five-year guarantee, see page 156. (Case diameter: 41 mm)



144 St Sa – black cowhide strap. Two-year guarantee, see page 156. (Case diameter: 41 mm)



144 St Sa – solid, expandable bracelet. Two-year guarantee, see page 156. (Case diameter: 41 mm)



144 St DIAPAL - back view.

Series 144 The sports

The sports chronograph

The 144 is one of our company's traditional watches. And the fact that it is still available shows how immensely popular it is.

- Case made of stainless steel, bead-blasted
- Sapphire crystal glass
- Transparent case back made of sapphire crystal glass
- Tachymeter and pulsometer scale inside
- Waterproof and pressure-resistant to 20 bar
- Resistant to low pressure

· 144 St DIAPAL:

- DIAPAL the lubricant-free anchor escapement
- Column wheel chronograph, exquisitley decorated
- Ar-Dehumidifying Technology enhances functional reliability and freedom from fogging
- Functionally reliable from -45°C up to +80°C
- Second time zone on 12-hour basis

• 144 St Sa:

- Ar-Dehumidifying Technology available as an option



144 St DIAPAL - side views.





240 St – solid, expandable bracelet. Two-year guarantee, see page 156. (Case diameter: 43 mm)



240 St GZ - black cowhide strap with integrated case.

Two-year guarantee, see page 156. (Case diameter: 43 mm)



240 St - dark-brown vintage-look cowhide strap. Two-year guarantee, see page 156. (Case diameter: 43 mm)



240 St - luminous design.



240 St - back view.

Series 240 St The sporty watch

Key functions and clarity are the all-important features of these watches. Optimum readability is guaranteed by the luminous hands and indices – which are made full use of in the 240 St GZ. For this watch was designed for sailors and water sports enthusiasts, who know the true importance of the weather and tides. Checking the local tide table to work out the current tidal range is just as essential as keeping an eye on the inner tide bezel. This can be used to read the relative water level of a location in terms of current tide, i.e. the time until the next high tide.

- Case made of stainless steel, bead-blasted
- Sapphire crystal glass
- Waterproof and pressure-resistant to 10 bar
- Resistant to low pressure

· 240 St GZ:

- Inner tide bezel showing high and low tide
- Dark blue dial

· 240 St:

- Inner pilot's bezel
- Black dial

Large picture: 240 St 62 - bead-blasted stainless-steel case and identical solid, expandable bracelet. Two-year guarantee, see page 156. (Case diameter: 43 mm)





356 Sa PILOT III - grey canvas leather strap. Two-year guarantee, see page 156. (Case diameter: 38.5 mm)



356 Sa PILOT II - fine-link bracelet with a butterfly folding clasp available as an option for an additional fee. Two-year guarantee, see page 156. (Case diameter. 38.5 mm)



356 Sa PILOT – cowhide leather strap with contrasting stitching.
Two-year guarantee, see page 156.
(Case diameter: 38.5 mm)



The exquisitely decorated movement with the blued screws is clearly visible through the sapphire crystal glass.

The traditional chronograph

At a modest 38.5 mm in diameter, the case boasts a fine satinised finish and exudes outstanding, sophisticated functionality. The anti-reflective coating on both sides of the highly curved sapphire crystal glass facilitates accurate reading of the dial even under extreme lighting conditions. In terms of design, the appeal of this successful series has been further enhanced by the attractive guilloché, silver electroplated dial of the 356 Sa PILOT III, the fine, exquisitely decorated movement, the tasteful finish and the blued screws adorning the precision mechanics.

- Case made of stainless steel, satinised
- Sapphire crystal glass
- Transparent case back made of sapphire crystal glass
- Available with a bead-blasted case, acrylic in the crystal and stainless-steel case back
- Waterproof and pressure-resistant to 10 bar
- Resistant to low pressure

· 356 Sa PILOT II:

- Copper electroplated quilloché dial
- · 356 Sa PILOT III:
 - Silver electroplated quilloché dial



Side view of the 356 Sa PILOT.

Large picture:
356 Sa PILOT III – black cowhide strap featuring alligator embossing and contrasting white stitching.
Two-year guarantee, see page 156.
(Case diameter: 38.5 mm)





358 Sa PILOT DS – fine-link satinised stainlesssteel bracelet. Three-year guarantee, see page 156. (Case diameter: 42 mm)



358 Sa PILOT B E – black silicone strap. Three-year guarantee, see page 156. (Case diameter: 42 mm)



358 Sa PILOT B E – dark-brown vintage-look cowhide strap. Three-year guarantee, see page 156. (Case diameter: 42 mm)



Back view of the **358 Sa PILOT DS** – the antireflective sapphire crystal glass provides an insight into the movement inside.

Series 358 Sa PILOT

The traditional chronograph

In keeping with the design of traditional instrumental chronographs, these watches captivate with their clarity, functionality and elegance. In addition to being 42 mm in diameter, the highly curved crystal characterises the overall appearance. Sapphire crystal is used for both the crystal and the glass back. Ar-Dehumidifying Technology ensures greater functional reliability and freedom from fogging. The watches feature a date and weekday display, with two attractive dials to choose from.

- Case made of stainless steel, satinised
- Ar-Dehumidifying Technology enhances functional reliability and freedom from fogging
- Sapphire crystal glass
- -Transparent case back made of sapphire crystal glass
- Waterproof and pressure-resistant to 10 bar
- Resistant to low pressure

· 358 Sa PILOT DS:

- Dial with decorative grinding

• 358 Sa PILOT B E:

- Dark-blue dial, with sunburst decoration
- Ivory-coloured coating on the indices, hands and numerals



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Side views of the 358 Sa PILOT DS.





358 DIAPAL – fine-link satinised stainless-steel bracelet. Five-year guarantee, see page 156. (Case diameter: 42 mm)



358 Sa PILOT - cowhide strap with alligator embossing and contrasting stitching. Three-year guarantee, see page 156. (Case diameter: 42 mm)



358 Sa PILOT – silicone strap. Three-year guarantee, see page 156. (Case diameter: 42 mm)



Back view of the **358 DIAPAL** – the anti-reflective sapphire crystal glass provides an insight into the movement inside.

The traditional chronograph

- Case made of stainless steel, satinised
- Ar-Dehumidifying Technology enhances functional reliability and freedom from fogging
- Sapphire crystal glass
- -Transparent case back made of sapphire crystal glass
- Waterproof and pressure-resistant to 10 bar
- Resistant to low pressure

· 358 DIAPAL:

- DIAPAL the lubricant-free anchor escapement
- Column wheel chronograph, exquisitley decorated
- Functionally reliable from -45°C up to +80°C
- Second time zone on 12-hour basis
- Date display
- Anthracite electroplated dial

· 358 Sa PILOT:

- Date and day of the week display





At 15 mm thick, the **358** fits the wrist ergonomically and is also fitted with an integrated drying capsule.





556 I RS - black vintage-look cowhide strap. Two-year guarantee, see page 156. (Case diameter: 38.5 mm)



556 A - cowhide strap with alligator embossing and contrasting stitching.
Two-year guarantee, see page 156.
(Case diameter: 38.5 mm)



556 I - expandable satinised stainless-steel bracelet with a folding safety clasp.
Two-year guarantee, see page 156.
(Case diameter: 38.5 mm)



556 I - luminous design.



Back view of the **556 A** and **556 I** - the antireflective sapphire crystal glass provides an insight into the movement inside.

The elegantly sporty watch

Striking lines, a minimal dial design and clear readability – typical SINN features that clearly demonstrate the relationship the watches in series 556 have with our instrumental pilot watches and navigation cockpit clocks. The focus on the hours, minutes, seconds and date as well as the satinised stainless-steel case emphasise the elegantly sporty appearance. Both the 556 A with matt black dial and Arabic numerals and the 556 I with shiny black dial and indices are fitted with a crystal and a transparent back made of sapphire crystal glass, allowing the delicate mechanical movement to be admired in all its intricacy.

- Case made of stainless steel, satinised
- Sapphire crystal glass
- Transparent case back made of sapphire crystal glass
- Waterproof and pressure-resistant to 20 bar
- Resistant to low pressure
- 556 A:
 - Matt black dial
- · 556 l:
 - Glossy black dial
- 556 A RS and 556 I RS:
 - Second hand in red





5561B - blue leather strap. The dial has been electroplated blue and finished with a sunburst decoration. Two-year guarantee, see page 156. (Case diameter: 38.5 mm)



556 I Mother-of-Pearl S – fine grey Alcantara* strap. Two-year guarantee, see page 156. (Case diameter: 38.5 mm)



5561B - sporty solid bracelet in stainless steel. The dial has been electroplated blue and finished with a sunburst decoration. Two-year guarantee, see page 156. (Case diameter: 38.5 mm)



556 | B - luminous design.



556 | B - back view.

The elegantly sporty watch with mother-of-pearl dial

Striking lines, a minimal dial design and clear readability – typical SINN features that clearly demonstrate the relationship the watches in series 556 have with our instrumental pilot watches and navigation cockpit clocks. The focus on the hours, minutes and seconds underlines the elegantly sporty appearance. With a choice of two different dials, you can customise your 556 to suit the occasion. We think the 556 I Mother-of-Pearl S edition makes a particularly strong masculine statement.

- Appliqués, meticulously attached by hand
- Case made of stainless steel, satinised
- Sapphire crystal glass
- Transparent case back made of sapphire crystal glass
- Waterproof and pressure-resistant to 20 bar
- Resistant to low pressure
- · 556 I B:
 - Blue electroplated dial, with sunburst decoration
- 556 I Mother-of-Pearl S:
 - Shimmering black mother-of-pearl dial

^{*}Alcantara is a registered trademark of Alcantara S.p.A.





717 - black vintage-look cowhide strap. Three-year guarantee, see page 156. (Case diameter: 45 mm)



717 - black silicone strap. Three-year guarantee, see page 156. (Case diameter: 45 mm)



The design and style of the Nabo 17 ZM provided the inspiration for model 717.



717 - luminous design.



717 - back view.

Model 717

The cockpit wristwatch

Originally designed for the German Luftwaffe's Tornado programme in the late 1970s, the design and style of the Nabo 17 ZM cockpit clock provided the inspiration for model 717. This timepiece also features a central stopwatch display for seconds and minutes in the form of large orange hands, which is created using our time-honoured SINN chronograph movement SZ01. The case houses an interior pilot's bezel, which can be smoothly operated from the outer diameter of the watch. In keeping with its predecessor, the dial is distinguished by its excellent readability, even in the dark, and thanks to the sapphire crystal glass with anti-reflective coating on both sides, under adverse lighting conditions too. All in all, and at 45 mm in diameter, the 717 cuts a fine figure.

- SINN chronograph movement SZ01
- Centre-mounted 60-minute stopwatch hand
- Case made of stainless steel, bead-blasted
- Black Hard Coating on a TEGIMENT Technology basis
- Ar-Dehumidifying Technology enhances functional reliability and freedom from fogging
- Sapphire crystal glass
- Interior pilot's bezel with illuminating triangle
- Waterproof and pressure-resistant to 20 bar
- Resistant to low pressure

Large picture: 717 - black vintage-look cowhide strap. Three-year guarantee, see page 156. (Case diameter: 45 mm)





836 - black vintage-look cowhide strap. Two-year guarantee, see page 156. (Case diameter: 43 mm)



836 - black silicone strap. Two-year guarantee, see page 156. (Case diameter: 43 mm)



836 – solid stainless-steel bracelet. Two-year guarantee, see page 156. (Case diameter: 43 mm)



836 - Iuminous design.



836 - side views.

Model 836

The instrumental watch with Magnetic Field Protection

The 836 combines instrumental functional robustness with sporty, practical design aesthetics. Equipped with hour, minute, second and date displays, this timepiece focuses on the essentials, boasts perfect readability and is extremely comfortable to wear thanks to a height of 10.6 mm. Indices, hour and minute hands coated in luminous white ensure optimum readability even in the dark. Clear design aesthetics and creative details combine to create sporty, practical features. These include the skeletonised hour and minute hands, which are coated in rhodium and matt brushed to create the finest silvery gleam. The light reflections are highly consistent with those of the polished glass rim of the satinised stainless-steel case.

- Case made of stainless steel, satinised/polished
- Case made with TEGIMENT Technology and therefore especially scratch-resistant
- Nickel-free case back, without TEGIMENT Technology
- Magnetic Field Protection up to 100 mT (= 80,000 A/m)
- Sapphire crystal glass
- Waterproof and pressure-resistant to 10 bar
- Resistant to low pressure





856 B-Uhr - calf leather strap with contrasting stitching. Loose leather underlay included in delivery. Direct assembly on request. Three-year guarantee, see page 156. (Case diameter 40 mm)



856 B-Uhr - sand-coloured canvas leather strap. Three-year guarantee, see page 156. (Case diameter: 40 mm)



856 B-Uhr - case with TEGIMENT Technology. Silicone strap with integrated case. Three-year guarantee, see page 156. (Case diameter: 40 mm)



856 B-Uhr - luminous design.

856 B-Uhr - side view.

Large picture:

856 B-Uhr - case and stainless-steel bracelet with TEGIMENT Technology. Solid, expandable stainless-steel bracelet with folding safety clasp. Three-vear augrantee, see page 156, (Case diameter 40 mm)

Model 856 B-Uhr

The observer watch

Our 856 B-Uhr continues a lona tradition of deck watches. As is customary with these watches, the hour hand of the 856 B-Uhr has been reduced. Unlike the minute hand, which moves in an external ring and dominates the dial, the hour hand moves in a separate inner hour circle. The high-tech features of this watch fulfil all the criteria of a deck watch. The surface of the bead-blasted stainless-steel case has also been hardened using TEGIMENT Technology, making it especially scratch-resistant, while Ar-Dehumidifying Technology guarantees greater functional reliability and freedom from fogging. In order to minimise magnetic interference, the 856 B-Uhr features Magnetic Field Protection. A total of 856 watches are being produced, each with an engraved limited-edition marking on the case back.

- Limited to 856 pieces
- Case made of stainless steel, bead-blasted
- Nickel-free case back without TEGIMENT Technology
- Case made with TEGIMENT Technology and therefore especially scratch-resistant
- Ar-Dehumidifying Technology enhances functional reliability and freedom from fogging
- Magnetic Field Protection up to 100 mT (= 80,000 A/m)
- Sapphire crystal glass
- Waterproof and pressure-resistant to 20 bar
- Resistant to low pressure





856 S UTC - black textile strap. Three-year guarantee, see page 156. (Case diameter: 40 mm)



856 S - solid, expandable bracelet, TEGIMENT Technology and Black Hard Coating, Three-year guarantee, see page 156. (Case diameter: 40 mm)



856 – solid, expandable bracelet and TEGIMENT Technology. Three-year guarantee, see page 156. (Case diameter: 40 mm)



856 UTC - luminous design.

Series 856

The pilot watch with Magnetic Field Protection

Just how functional can a watch be if it focuses on its fundamental purpose? The answer lies, for example, in the design of the dial. This ensures especially clear readability with starkly contrasting hands, indices and numerals against the glare-free black dial. With extremely large numerals for intuitive orientation and accurate reading even in adverse conditions.

- Case made of stainless steel, bead-blasted
- Case made with TEGIMENT Technology and therefore especially scratch-resistant
- Nickel-free case back without TEGIMENT Technology
- Ar-Dehumidifying Technology enhances functional reliability and freedom from fogging
- Magnetic Field Protection up to 100 mT (= 80,000 A/m)
- Sapphire crystal glass
- Waterproof and pressure-resistant to 20 bar
- Resistant to low pressure
- · 856 S/856 S UTC:
 - Black Hard Coating on a TEGIMENT Technology basis
- · 856 UTC/856 S UTC:
 - Second time zone on 24-hour basis



At 11 mm thick, the **856** fits the wrist ergonomically and is also fitted with an integrated drying capsule.





857 S UTC - silicone strap. Three-year guarantee, see page 156. (Case diameter: 43 mm)



857 S - solid, expandable bracelet, TEGIMENT Technology and Black Hard Coating. Three-year guarantee, see page 156. (Case diameter: 43 mm)



857 - solid, expandable bracelet and TEGIMENT Technology, Three-year guarantee, see page 156. (Case diameter: 43 mm)



857 S UTC - luminous design.



Side view of the **857** with a captive pilot's bezel, TEGIMENT Technology and drying capsule.

Series 857

The pilot watch with Magnetic Field Protection and captive rotating bezel

The stainless-steel pilot's bezel with minute ratcheting can be rotated on both sides and, thanks to a special mechanical system, is securely attached to the case.

- Case made of stainless steel, bead-blasted
- Case made with TEGIMENT Technology and therefore especially scratch-resistant
- Nickel-free case back without TEGIMENT Technology
- Ar-Dehumidifying Technology enhances functional reliability and freedom from fogging
- Magnetic Field Protection up to 100 mT (= 80,000 A/m)
- Captive pilot's bezel with minute ratcheting
- Sapphire crystal glass
- Waterproof and pressure-resistant to 20 bar
- Resistant to low pressure

· 857 S/857 S UTC:

- Black Hard Coating on a TEGIMENT Technology basis

• 857 UTC/857 S UTC:

- Second time zone on 24-hour basis





900 DIAPAL – fine grey Alcantara* strap. Fiveyear guarantee, see page 156. (Case diameter: 44 mm)





900 PILOT - black silicone strap. Three-year guarantee, see page 156. (Case diameter: 44 mm)



900 PILOT -brown vintage-look cowhide strap. Three-year guarantee, see page 156. (Case diameter: 44 mm)



900 DIAPAL - luminous design.



The **900 PILOT** was awarded the "Goldene Unruh" in 2010.

Series 900

The large pilot chronograph

Our pilot watches have been setting functional and technological standards since day one. It is therefore only logical that the 900 series seamlessly follows on from this, while at the same time sporting a contemporary design. The result is a pilot chronograph that meets the highest standards in terms of precision and aesthetics.

- Case made of stainless-steel, satinised
- Case made with TEGIMENT Technology and therefore especially scratch-resistant
- Nickel-free case back without TEGIMENT Technology
- Ar-Dehumidifying Technology enhances functional reliability and freedom from fogging
- Second time zone on 24-hour basis
- Magnetic Field Protection up to 100 mT (= 80,000 A/m)
- Sapphire crystal glass
- Waterproof and pressure-resistant to 20 bar
- Resistant to low pressure

· 900 DIAPAL:

- DIAPAL the lubricant-free anchor escapement
- Functionally reliable from -45°C up to +80°C





910 SRS - shell cordovan strap with contrasting stitching. Two-year guarantee, see page 156. (Case diameter: 41.5 mm)



910 SRS – black textile strap. Two-year guarantee, see page 156. (Case diameter: 41.5 mm)



910 SRS - black vintage-look cowhide strap. Two-year guarantee, see page 156. (Case diameter: 41.5 mm)



The anti-reflective sapphire crystal glass provides an insight into the fine, exquisitely decorated movement inside.



Detailed view of the complex, blued column wheel which controls the start, stop and reset functions.

Model 910 SRS

The column wheel chronograph with flyback function

The 910 SRS is a particularly stylish watch characterised by sophisticated horological details. For example, the stopwatch also features a flyback chronograph function, which allows the chronograph's hand to be stopped, reset to zero, and restarted by pushing the reset button at 4 o'clock. The advantage of this is accurate time measurement down to the last second of consecutive time intervals. The column wheel chronograph marks another complication of sophisticated craftsmanship in this watch. Extremely complex to produce, it requires the utmost care and precision in assembly. Attached appliqués and polished, shiny chamfers on the counter rings, which correspond harmoniously with the polished glass rim, underline the high-quality aesthetics of this timepiece.

- Case made of stainless steel, satinised/polished
- Column wheel chronograph, exquisitely decorated
- Flyback chronograph function
- Double scale for measuring units per hour (e.g. kilometres)
- Sapphire crystal glass
- Transparent case back made of sapphire crystal glass
- Attached appliqués
- Waterproof and pressure-resistant to 10 bar
- Resistant to low pressure

910 SRS - fine-link stainless-steel bracelet. Two-year guarantee, see page 156. (Case diameter: 41.5 mm)





936 - black textile strap. Two-year guarantee, see page 156. (Case diameter: 43 mm)



936 - black silicone strap with integrated case. Two-year guarantee, see page 156. (Case diameter: 43 mm)



936 – solid stainless-steel bracelet. Two-year guarantee, see page 156. (Case diameter: 43 mm)



936 - luminous design.



936 - side views.

Model 936

The chronograph with 60-minute stopwatch display

The chronograph 936 is a reliable time measurement instrument equipped with TEGIMENT Technology and Magnetic Field Protection. The dial is designed to greatly increase clarity and readability. The chronograph movement SZ05 was redesigned in house and focuses on the stopwatch minute display with 60-second scale at 3 o'clock and running seconds at 9 o'clock. The advantage of this is that it does away with the necessity of adding stopwatch minutes, as is required with conventional 30-second stopwatch minute displays. The 936 also boasts clear design aesthetics expressed through elegant details such as the skeletonised hour and minute hands – both of which are rhodium coated and matt brushed. The counter rings for the stopwatch minutes and seconds have an iridescent effect, caused by a fine central groove.

- Awarded the Red Dot Award 2020
- SINN movement SZ05 with a 60-second scale for the stopwatch minute
- Case made of stainless steel, satinised/polished
- Nickel-free case back, without TEGIMENT Technology
- Case made with TEGIMENT Technology and therefore especially scratch-resistant
- Magnetic Field Protection up to 100 mT (= 80,000 A/m)
- Sapphire crystal glass
- Waterproof and pressure-resistant to 10 bar
- Resistant to low pressure





HUNTING WATCH 3006 – green silicone strap. Three-year guarantee, see page 156. (Case diameter: 44 mm)



JAGDUHR 3006 – olive grey textile strap. Three-year guarantee, see page 156. (Case diameter: 44 mm)



HUNTING WATCH 3006 - fine-link satinised stainless-steel bracelet with TEGIMENT Technology. Three-year guarantee, see page 156. (Case diameter: 44 mm)



HUNTING WATCH 3006 - luminous design.



Side view of the **HUNTING WATCH 3006**: with integrated drying capsule.



Side view of the HUNTING WATCH 3006.

Large picture: HUNTING WATCH 3006 - brown vintage-look cowhide strap. Three-year guarantee, see page 156. (Case diameter: 44 mm)

HUNTING WATCH 3006

The chronograph with moonlight display

The HUNTING WATCH 3006 is the first of our watches to feature this type of extraordinary complication. The moonlight display has been purposefully positioned at 6 o'clock, with a luminous moon symbol to ensure it is easy to see, even in the dark. Hunters not only need a clear, open view for a successful hunt; they also need the right light. Hunters refer to the right lighting conditions for stalking as good hunting light. The moonlight display on the HUNTING WATCH 3006 shows when the moon is shining bright enough to see and catch the game.

- Awarded the German Design Award "Excellent Product Design 2020"
- Case made of stainless steel, satinised
- Case made with TEGIMENT Technology and therefore especially scratch-resistant
- Ar-Dehumidifying Technology ensures greater functional reliability and freedom from fogging
- Sapphire crystal glass
- Transparent case back made of sapphire crystal glass
- Moonlight display at 6 o'clock
- 24-hour display with integrated day and night display
- Centre-mounted date hand
- Weekday and month display
- Waterproof and pressure-resistant to 20 bar
- Resistant to low pressure

Man and hunting

Hunting played a fundamental role in human history. It was purely by hunting and gathering food that prehistoric human beings ensured their survival. The earliest historical references to the targeted hunting of prey date back to Homo erectus. A valuable source of nutrition, this prey was essential for survival. Hunting thus played a crucial role in the evolution of mankind - and forms one of the most important foundations of human culture.

Hunting and conservation go hand in hand

Although hunting was originally all about catching wild animals for food, times have now changed and now it means something different. These days, the more commonplace interpretation of hunting is gamekeeping, a practice which also forms an important and obligatory part of hunting law. Gamekeeping refers to the process of protecting and ensuring the conservation of our wildlife, promoting biological diversity and good health while safeguarding natural resources. With all sorts of conservation measures, such as habitat conservation and habitat networks, hunters are helping to maintain rare ecosystems and creating spaces for threatened species to thrive in our intensively farmed landscapes. So as far as the environment is concerned, hunting is beneficial for the ecosystem, and hunting and conservation are inextricably linked.

A robust, precise instrument for time measurement

With its high-quality features, the HUNTING WATCH 3006 meets the demands of a robust and accurate instrument for time measurement. Particularly due to the SINN technologies used, it is ideal for professional hunting and thus an indispensable piece of hunting equipment. These kinds of technology make the watch remarkably robust and ensure that it has a high degree of mechanical stability. For example, Ar-Dehumidifying Technology ensures greater functional reliability and freedom from fogging. The satinised surface of the stainless-steel case has also been hardened using TEGIMENT Technology, making it especially scratch-resistant. The watch is also pressure-resistant to 20 bar and resistant to low pressure.

Full calendar

The full calendar on the **HUNTING WATCH 3006** displays the day of the week and the month, and includes a centre-mounted date hand.

12- and 24-hour display



The seconds hand and the hand for the 24-hour display with integrated day at 6 o'clock and the and night separation is located at 9 o'clock in the counter.

Chronograph/stopwatch



The counter for the stopwatch hour is located counter for the stopwatch stopwatch seconds are displayed with the hand from the dial centre.

Moonlight display



Read the moonlight display directly at 6 o'clock. The curved vellow arrow in the stylised hairline cross indiminute is at 12 o'clock. The cates the direction in which the moon disc is movina.



The assembly of the winding rotor completes the exquisitely decorated movement of the HUNTING WATCH 3006. The delicate hands, the dial and the moon disc are ready for assembly.

Read the full moon period with the HUNTING WATCH 3006

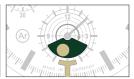
The best natural light for hunting at night is between three days before and after full moon, although the brightness of the moon does also depend on the weather. The moonlight display on the HUNTING WATCH 3006 allows hunters to optimally gauge when the best hunting light will be, allowing them to instantly read the full moon period at a glance. The curved yellow arrow in the stylised hairline cross indicates the direction in which the moon disc is moving.



Display three days before full moon



Full moon display



moon



Display three days after full Read the moonlight display perfectly in the darkness.

This functionality is supported by the watch's outstanding readability. The indices and moon symbol are fully luminous. The time and moonlight display are thus perfectly readable, even in the darkness.



Mission Timers and Diving Watches

We are the first and only company in the watchmaking industry to manufacture diving watches in compliance with European diving equipment standards, and the first to test and certify them for pressure resistance, water resistance and freedom from fogging. Our mission timers (EZM), which celebrated their 25th anniversary in 2022, are made specially for professional users. These watches are developed specifically to meet the demands of the mission. They are distinguished by their excellent readability and rapid time-recording characteristics.





EZM 13.1 - black silicone strap. Three-year guarantee, see page 156. (Case diameter: 41 mm)



EZM 3F - black vintage-look cowhide strap. Three-year guarantee, see page 156. (Case diameter: 41 mm)



EZM 3 - black textile strap. Three-year guarantee, see page 156. (Case diameter: 41 mm)

DNV verifies and certifies the pressure resistance of the EZM 3 and the EZM 13.1 to a diving depth of 500 metres and its temperature resistance and functionality in accordance with the European diving equipment standards EN250 and FN14143.



EZM 13.1 - luminous design.

(Case diameter: 41 mm)

Models EZM 13.1/EZM 3F/EZM 3

The mission timers with Magnetic Field Protection

- Case made of stainless steel, bead-blasted
- Ar-Dehumidifying Technology enhances functional reliability and freedom from fogging
- Magnetic Field Protection up to 100 mT (= 80,000 A/m)
- Functionally reliable from -45°C up to +80°C
- Sapphire crystal glass
- Resistant to low pressure

EZM 13.1:

- Tested based on European diving equipment standards and certified by DNV
- Waterproof and pressure-resistant to 50 bar (= 500 m water depth), certified by DNV
- Captive diver's bezel with minute ratcheting
- SINN movement SZ02 with a 60-minute scale for the stopwatch minute

EZM 3F:

- Pilot's bezel with minute ratcheting
- Waterproof and pressure-resistant to 20 bar

EZM 3:

- Tested based on European diving equipment standards and certified by DNV
- Waterproof and pressure-resistant to 50 bar (= 500 m water depth), certified by DNV

Large picture:

EZM 13.1 - solid, expandable stainless-steel bracelet - Diver's bezel with minute ratcheting with folding safety clasp. Three-year guarantee, see page 156.

57









EZM 12 - silicone strap with quick-change-system. Three-year guarantee, see page 156. (Case diameter: 44 mm)



EZM 12 - luminous design.



The watch comes in a fine case with a SINN "mission timer" pocketknife, band replacement tool, 6 spare spring bars and a brochure.



EZM 12 - back view.



EZM 12 – side view. A distinct feature: the orange crown with built-in drying capsule for setting the inner rotating bezel.

Model EZM 12

The EZM 12 - designed for the air rescue service

Designed with rescue missions in mind, the EZM 12 is distinguished by its clear displays: PulsRotor, count-up inner rotating bezel and countdown outer rotating bezel. Another special feature is the easy-clean watch and strap, which can be sterilised using various disinfectants. The silicone strap can also be removed without the use of tools. The rotating bezel is removed using the screwdriver on the pocketknife provided.

- Awarded the Red Dot Award 2019 and German Design Award 2020
- Case made of stainless steel, bead-blasted
- Case made with TEGIMENT Technology and therefore especially scratch-resistant
- Nickel-free case back, without TEGIMENT Technology
- Bezel with Black Hard Coating on a TEGIMENT Technology basis
- Ar-Dehumidifying Technology ensures functional reliability and freedom from fogging
- Magnetic Field Protection up to 100 mT (= 80,000 A/m)
- Count-up inner rotating bezel for quick and easy reading of the platinum ten minutes and golden hour
- Countdown outer rotating bezel
- Pulse rotor with PulsRotor scale for measuring heart rate
- Sapphire crystal glass
- Functionally reliable from -45°C up to +80°C
- Waterproof and pressure-resistant to 20 bar
- Resistant to low pressure

Saving lives with the EZM 12

Golden hour - platinum ten minutes:

Sometimes minutes and seconds can mean the difference between life and death.

The aim of modern-day emergency doctors is to save the lives of seriously injured trauma patients, provide them with medical care and transport them to a suitable hospital within the hour. In cases like this, minutes and seconds can mean the difference between life and death. The golden hour is particularly important on a rescue mission: one hour to save a life, 60 minutes, 3,600 seconds. Therefore the clock is constantly ticking in the background, setting the pace for patients in a critical condition.

A rescue mission is never expected, always dramatic and generally involves chaos at the scene of the incident. Weather conditions and possibly even hazardous situations often intensify the situation. The sense of time elapsed and remaining in the golden hour becomes blurred in the stress, chaos and presence of firefighters, police and other first responders. Yet clarity and efficiency are essential. Wherever a rescue helicopter lands, every

minute counts. The patient should be stabilised, any bleeding stopped and oxygen supplied all within the first ten minutes. While emergency doctors are trained to treat patients rapidly and expertly, constantly keeping an eye on the time is another matter. Especially since critical decisions are made and life-saving measures performed in the first ten minutes – hence the term platinum ten minutes.



The EZM 12 features three displays specially designed for emergency doctors: pulse rotor, count-up inner rotating bezel and countdown outer rotating bezel.

The golden hour is defined differently in a civil and military context. Often the latter involves remote and inaccessible terrain combined with a real danger of bombardment or on-site explosives.

The primary aim here is to evacuate the patient from the danger zone. Only then can medical measures be performed. All soldiers carry a tourniquet (a constricting band) to stop themselves or a comrade from bleeding. First aid should be administered to such a patient within the golden hour. This can be performed by mobile doctors or advanced medical posts, i.e. forward surgical teams that perform life-saving measures and operations far away from a hospital.

From the Alps to the North Sea, from the Eifel to Lusatia: rescue helicopters (RH) are stationed virtually all over Germany to rapidly respond to patients in the event of an emergency – without being caught up in traffic jams or having to overcome geographical obstacles. They are deployed within a 50–70 km radius. Critical care helicopters (CCH), on the other hand, fly patients from hospital to hospital and therefore cover longer distances. The first helicopter bases were built in 1970. The rescue teams – consisting of a pilot, an emergency doctor and paramedics – are on standby seven days a week, 52 weeks a year, from morning till night (if equipped with special night-vision devices). A helicopter is ready to fly in less than two minutes. This saves the rescue workers valuable time, which could mean the difference between life and death. In Germany, the air rescue service is regulated by the individual states, with each state being backed by different organisations. There are currently over 70 helicopter bases in Germany, with most aircraft being deployed for primary missions, i.e. transporting the emergency doctor to the emergency patient to perform life-saving measures and ensure they are stable enough to be transported.

In designing the EZM 12, we were able to draw on the vast experience gained by Dirk Weitzel, emergency doctor at the air rescue base Christoph 23 in Koblenz and serving soldier in the rank of lieutenant colonel (Medical Corps), and Jens Schwietring, long-serving senior helicopter doctor at Christoph 23 and reserve lieutenant colonel (Medical Corps), during many civil and military rescue operations. The aim was to give air rescue workers a handy tool to help them keep an eye on – or ideally beat – the golden hour.

Specially designed as a mission timer for emergency service doctors, the EZM 12 is the perfect tool for monitoring one-hour intervals as it also features two rotating bezels with a countdown and count-up minutes scale. The inner rotating bezel shows the count-up to the platinum ten minutes and golden hour. The outer rotating bezel offers a countdown option, for example for monitoring the periods of effect for certain drugs or the minutes remaining until the rescue helicopter's rotors are started. Reminiscent of the air rescue service, the seconds hand is designed in the shape of a helicopter rotor and features a pulse scale. This enables easy recording of the heart rate every 15 seconds.

Time is always of the essence in an emergency – but everpresent and tangible thanks to the EZM 12.

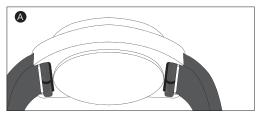


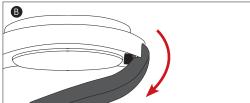
Emergency doctor Dirk Weitzel from the air rescue base in Koblenz and the EZM 12 responding to an emergency in the rescue helicopter.

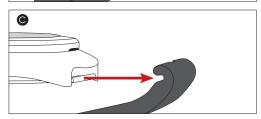
Easy to clean and sterilise

A special feature of the EZM 12 is the easy-clean strap and rotating bezel, which can be quickly and easily removed for cleaning and sterilisation. Each component can be cleaned with disinfectants containing ethanol, propan-2-ol, propan-1-ol and N-alkyl aminopropyl glycine, such as Bacillol® 30 Foam. The silicone strap can also be removed without the use of tools. The rotating bezel is easily removed using the large screwdriver on the pocketknife provided.

Removing the strap

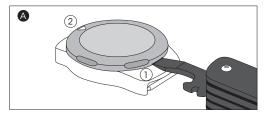


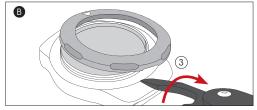


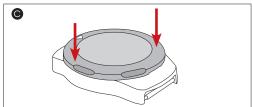


- Take off the EZM 12 to remove the strap. To prevent losing the watch, the strap cannot be removed while it is on your wrist.
- Bend one side of the silicone strap downwards towards the case back.
- Pull this side of the silicone strap outwards towards the side. Do the same for the other side of the silicone strap. To attach the strap, repeat the process in reverse order.

Removing the outer rotating bezel







- A Insert the large screwdriver on the pocketknife provided bevelled side up into the recess 1 of the outer rotating bezel, directly opposite the triangular mark 2. Or use another suitable tool.
- **3** Turn the screwdriver **3**. This will cause the outer rotating bezel to detach from the case.
- To attach the outer rotating bezel to the case, place it back on the case and press down with both thumbs until you feel and hear it click into place. Finally, check to make sure it can easily be rotated.

Key displays at a glance

Designed with rescue missions in mind, the EZM 12 is distinguished by its three clear displays: PulsRotor, countup inner rotating bezel and countdown outer rotating bezel. These three functions enable critical times to be measured and monitored.

The PulsRotor



The PulsRotor is used to quickly record the pulse rate. Wait until one of the four rotor blades reaches the beginning of the pulse rotor scale (at 12 o'clock). Count 15 beats and on the 15th beat read the pulse rate in beats per minute on the PulsRotor scale. The white rotor blade corresponds to the seconds hand on a standard three-hand watch and also serves as a stop-seconds function for setting the time with to-the-second precision.

The count-up inner rotating bezel



The inner rotating bezel is for monitoring the platinum ten minutes (orange minutes) and golden hour (white minutes on black-running-into-orange background). On being alerted, the crown is used to set the starter mark on the inner rotating bezel to 2 o'clock on the minutes hand, allowing you to keep a close eye on the race against time and for life.

The countdown outer rotating bezel





The outer rotating bezel is designed as a countdown rotating bezel. This can be used for example for keeping track of the time remaining until the helicopter rotors start or for monitoring the time it takes for medication to take effect. The remaining time (e.g. 10 min.) is set on the minutes hand. Once the minutes hand reaches the triangular mark, the preset time has elapsed.





206 ARKTIS II: solid, expandable stainless-steel bracelet with folding safety clasp.
Three-year guarantee, see page 156.
(Case diameter: 43 mm)



206 ARKTIS II: blue silicone strap. Three-year guarantee, see page 156. (Case diameter: 43 mm)



206 St Ar: black vintage-look cowhide strap. (The leather strap is not suitable for diving.) Three-year guarantee, see page 156. (Case diameter: 43 mm)

DNV

DNV verifies and certifies the pressure resistance of our **206 series** to a diving depth of 300 metres and its temperature resistance and functionality in accordance with the European diving equipment standards EN250 and EN14143.



206 ARKTIS II - luminous design.

Large picture: 206 st Ar.; silicone strap. 206 ARKTIS II: blue cowhide strap with alligator embossing and contrasting stitching. (The leather strap is not suitable for diving.) Three-year guarantee, see page 156. (Case diameter: 43 mm)

Series 206

A contemporary take on the traditional diving chronograph

Unveiled in 1999, the 203 ARKTIS was the first diving chronograph to feature Temperature Resistance Technology. To mark its 20th anniversary in 2019, we have developed the 206 ARKTIS II featuring a blue dial. The 206 St Ar with its black dial makes reference to the 203 St and 203 Ti Ar, in which Ar-Dehumidifying Technology was first used in 1995.

- Case made of stainless steel, polished/satinised
- -Tested based on European diving equipment standards and certified by DNV
- Waterproof and pressure-resistant to 30 bar (= 300 m water depth), certified by DNV
- Ar-Dehumidifying Technology ensures greater functional reliability and freedom from fogging
- Captive diver's bezel with minute ratcheting
- Sapphire crystal glass
- Transparent case back made of sapphire crystal glass
- Resistant to low pressure

· 206 ARKTIS II:

- Electroplated blue dial, with sunburst decoration
- Functionally reliable from -45°C up to +80°C

· 206 St Ar:

- Electroplated black dial





T50 GOLDBRONZE – olive grey textile strap. Three-year guarantee, see page 156. (Case diameter: 41 mm)



We have engraved the **T50 GOLDBRONZE** model's dial with an irregular, intricate pattern. This engraving makes every watch unique.

DNV

DNV verifies and certifies the pressure resistance of our **T50** series to a diving depth of 500 metres and its temperature resistance and functionality in accordance with the European diving equipment standards EN250 and EN14143.



T50 GOLDBRONZE - luminous design.



T50 GOLDBRONZE - back view.

Model T50 GOLDBRONZE

The diving watch with Captive Safety Bezel

The T50 GOLDBRONZE edition, limited to only 300 pieces, is another impressive demonstration of our extensive expertise in the field of metallurgy. For this interesting timepiece, we are using the bronze alloy Goldbronze 125 developed by ourselfs, which has a patent pending.

- Limited to 300 pieces
- Dial with decorative grinding
- Case, crown and bezel made of Goldbronze 125, bead-blasted
- Case back made of high-strength titanium
- Tested based on European diving equipment standards and certified by DNV
- Waterproof and pressure-resistant to 50 bar (= 500 m water depth), certified by DNV
- Captive diver's bezel with guard to prevent accidental misadjustment
- Colour-differentiated luminous paint for minute hand, second hand and key mark on the bezel for clear reading of set time
- Crown at 4 o'clock to prevent pressure on the back of the hand
- Ar-Dehumidifying Technology enhances functional reliability and freedom from fogging
- Sapphire crystal glass
- Resistant to low pressure





T50 GBDR - grey silicone strap. Three-year guarantee, see page 156. (Case diameter: 41 mm)



T50 GBDR - olive grey textile strap. Three-year guarantee, see page 156. (Case diameter: 41 mm)



DNV verifies and certifies the pressure resistance of our **150 series** to a diving depth of 500 metres and its temperature resistance and functionality in accordance with the European diving equipment standards EN250 and EN14143.



T50 GBDR - luminous design.



T50 GBDR - back view.

Large picture: **150 GBDR** - solid, expandable titanium bracelet and folding safety clasp. Three-year guarantee, see page 156. (Case diameter: 41 mm)

Model T50 GBDR

The diving watch with Captive Safety Bezel

The T50 GBDR is a completely separate and masculine counterpart to the T50 GOLDBRONZE, even though this timepiece has a number of technical features in common with the T50 GOLDBRONZE. The key design element of the T50 GBDR model is the Captive Safety Bezel made of Goldbronze 125. It harmonises perfectly with the matte black dial – an interplay that skilfully contrasts with the more objective-technical appearance of the bead-blasted and anti-allergenic high-strength titanium case. The watch has a diameter of 41 mm and is suitable for wear in any situation, including on narrow wrists.

- Case made of high-strength titanium, bead-blasted
- Tested based on European diving equipment standards and certified by DNV
- Waterproof and pressure-resistant to 50 bar (= 500 m water depth), certified by DNV
- Captive diver's bezel with guard to prevent accidental misadjustment
- Bezel made of Goldbronze 125, bead-blasted
- Colour-differentiated luminous paint for minute hand, second hand and key mark on the bezel for clear reading of set time
- Crown at 4 o'clock to prevent pressure on the back of the hand
- Ar-Dehumidifying Technology enhances functional reliability and freedom from fogging
- Sapphire crystal glass
- Resistant to low pressure





T50 - solid, expandable titanium bracelet and folding safety clasp.
Three-year guarantee, see page 156.
(Case diameter: 41 mm)



T50 - black textile strap. Three-year guarantee, see page 156. (Case diameter: 41 mm)



DNV verifies and certifies the pressure resistance of our **T50 series** to a diving depth of 500 metres and its temperature resistance and functionality in accordance with the European diving equipment standards EN250 and EN14143.



T50 - luminous design.



T50 - back view.

Model T50

The high-strength titanium diving watch with Captive Safety Bezel

Masculine design vocabulary with a concept tailored for high operational reliability – that's the concise profile of the T50. A look at its properties shows: with this diver's watch, nothing can go wrong when diving.

- Case made of high-strength titanium, bead-blasted
- Tested based on European diving equipment standards and certified by DNV
- Waterproof and pressure-resistant to 50 bar (= 500 m water depth), certified by DNV
- Captive diver's bezel with guard to prevent accidental misadjustment
- Bezel with TEGIMENT Technology and therefore especially scratch-resistant
- Colour-differentiated luminous paint for minute hand, second hand and key mark on the bezel for clear reading of set time
- Crown at 4 o'clock to prevent pressure on the back of the hand
- Ar-Dehumidifying Technology enhances functional reliability and freedom from fogging
- Sapphire crystal glass
- Resistant to low pressure





U1 \$ Mother-of-Pearl \$ - black silicone strap with large folding clasp or butterfly folding clasp. Two-year guarantee, see page 156. (Case diameter: 44 mm)



U1 \$ Mother-of-Pearl \$ - black textile strap. Two-year guarantee, see page 156. (Case diameter: 44 mm)



U1 S Mother-of-Pearl S - solid, expandable stainless-steel bracelet and Black Hard Coating on a TEGIMENT Technology basis.
Two-year guarantee, see page 156.
(Case diameter: 44 mm)

DNV verifies and certifies the pressure resistance of our **U1** series to a diving depth of 1,000 metres and its temperature resistance and functionality in accordance with the European diving equipment standards EN250 and EN14143.



U1 S Mother-of-Pearl S – luminous design.

Model U1 S Mother-of-Pearl S

The diving watch with mother-of-pearl dial

Without question, it is the shimmering mother-of-pearl on the U1 S Mother-of-Pearl S – limited to 300 pieces – that makes the dial and the entire watch so striking, in part because this natural product goes so well with the high-quality Black Hard Coating. The result of this successful collaboration is a timepiece with a unique, technical appeal that is a joy to wear each and every day.

- Limited to 300 pieces
- Shimmering mother-of-pearl dial
- Case and crown made from high-strength seawater-resistant German Submarine Steel
- Tested based on European diving equipment standards and certified by DNV
- Waterproof and pressure-resistant to 100 bar (= 1,000 m water depth), certified by DNV
- Captive diver's bezel with minute ratcheting
- Black Hard Coating on a TEGIMENT Technology basis
- Crown at 4 o'clock to prevent pressure on the back of the hand
- Sapphire crystal glass
- Resistant to low pressure

Large picture: U1 S Mather-of-Pearl S - solid, expandable stainless-steel bracelet and Black Hard Coating on a TEGIMENT Technology basis. Two-year guarantee, see page 156. (Case diameter: 44 mm)





U1 B - solid, expandable stainless-steel bracelet with folding safety clasp. Two-year guarantee, see page 156. (Case diameter: 44 mm)



U1 SDR – red silicone strap. Diver's bezel with Black Hard Coating on a TEGIMENT Technology basis. Two-year guarantee, see page 156. (Case diameter: 44 mm)



U1 - black silicone strap. Two-year guarantee, see page 156. (Case diameter: 44 mm)

DNV verifies and certifies the pressure resistance of our **U1 series** to a diving depth of 1,000 metres and its temperature resistance and functionality in accordance with the European diving equipment standards EN250 and EN14143.



U1 - luminous design.

Series U1

The diving watch made of German Submarine Steel

Clear readability thanks to a striking, distinctive design. Easily adjustable rotating bezel, even when wearing gloves. Robust, water-resistant and pressure-resistant.

- Case and crown made of high-strength, seawater-resistant German Submarine Steel
- Tested based on European diving equipment standards and certified by DNV
- Waterproof and pressure-resistant to 100 bar (= 1,000 m water depth), tested and certified by DNV
- Diver's bezel made with TEGIMENT Technology and therefore especially scratch-resistant
- Captive diver's bezel with minute ratcheting
- Sapphire crystal glass
- Resistant to low pressure
- · U1 SDR:
 - Diver's bezel with Black Hard Coating on a TEGIMENT Technology basis
- U1 B:
 - Matt-blue dial





U1 S – red silicone strap. Case and captive diver's bezel with Black Hard Coating on a TEGIMENT Technology basis. Two-year guarantee, see page 156. (Case diameter: 44 mm)



U1 S E – black textile strap. Two-year guarantee, see page 156. (Case diameter: 44 mm)



U1 S E – brown vintage-look cowhide strap (The leather strap is not suitable for diving). Two-year guarantee, see page 156. (Case diameter: 44 mm)

DNV verifies and certifies the pressure resistance of our **U1 S series** to a diving depth of 1,000 metres and its temperature resistance and functionality in accordance with the European diving equipment standards EN250 and EN14143.



U1 S - luminous design.

Series U1 S

The diving watch made of German Submarine Steel

The U1 S and the U1 S E are two attractive versions of one of our most popular diver's watches, the U1. As the U1 S, the watch comes with an all-over Black Hard Coating on a TEGIMENT Technology basis, which further highlights its design. The U1 S E also features distinctive colouring, with a striking combination of high-quality Black Hard Coating and ivory-coloured accents. This vintage-style colour scheme makes for an eye-catching contrast on this watch.

- Case and crown made of high-strength, seawater-resistant German Submarine Steel
- Tested based on European diving equipment standards and certified by DNV
- Waterproof and pressure-resistant to 100 bar (= 1,000 m water depth), certified by DNV
- Captive diver's bezel with minute ratcheting
- Black Hard Coating on a TEGIMENT Technology basis
- Sapphire crystal glass
- Resistant to low pressure

U1 S E:

- Ivory-coloured coating on the indices, hands and numerals





U2 (EZM 5) – silicone strap. Three-year guarantee, see page 156. (Case diameter: 44 mm)



U2 SDR (EZM 5) – solid, expandable stainlesssteel bracelet. Diver's bezel with Black Hard Coating on a TEGIMENT Technology basis. Three-year guarantee, see page 156. (Case diameter: 44 mm)



U2 S (EZM 5) – solid, expandable stainlesssteel bracelet, with Black Hard Coating on a TEGIMENT Technology basis. Three-year guarantee, see page 156. (Case diameter: 44 mm)

DNV verifies and certifies the pressure resistance of our **U2 (EZM 5) series** to a diving depth of 2,000 metres and its temperature resistance and functionality in accordance with the European diving equipment standards EN250 and EN14143.

U2 (EZM 5) - luminous design.

Large picture: **U2 S (EZM 5)** – silicone strap. Three-year guarantee, see page 156. (Case diameter: 44 mm)

Series U2 (EZM 5)

The mission timer made of German Submarine Steel

The U2 is a professional mission timer – not least due to the fact that it is made of genuine German Submarine Steel, a material with extreme seawater resistance and the highest level of non-magnetic properties.

- Case and crown made of high-strength, seawater-resistant German Submarine Steel
- Tested based on European diving equipment standards and certified by DNV
- Waterproof and pressure-resistant to 200 bar (= 2,000 m water depth), certified by DNV
- Diver's bezel made with TEGIMENT Technology and therefore especially scratch-resistant
- Captive diver's bezel with minute ratcheting
- Ar-Dehumidifying Technology enhances functional reliability and freedom from fogging
- Functionally reliable from -45°C up to +80°C
- Sapphire crystal glass
- Second time zone on 24-hour basis
- Resistant to low pressure

· U2 SDR (EZM 5):

 Diver's bezel with Black Hard Coating on a TEGIMENT Technology basis

• U2 S (EZM 5):

 Case made with Black Hard Coating on a TEGIMENT Technology basis





U50 - black silicone strap with large folding clasp or butterfly folding clasp. Two-year guarantee, see page 156. (Case diameter: 41 mm)



U50 SDR – Captive diver's bezel with Black Hard Coating on a TEGIMENT Technology basis. Solid, expandable stainless-steel bracelet with folding safety clasp. Two-year guarantee, see page 156. (Case diameter: 41 mm)



U50 S - case and diver's bezel with Black Hard Coating. Red silicone strap. Two-year guarantee, see page 156. (Case diameter: 41 mm)

DNV verifies and certifies the pressure resistance of our **U50** series to a diving depth of 500 metres and its temperature resistance and functionality in accordance with the European diving equipment standards EN250 and EN14143.



U50 - luminous design.

Large picture: **U50 DS** - solid, expandable stainless-steel bracelet with folding safety clasp. Two-year guarantee, see page 156. (Case diameter: 41 mm)

Series U50

The diving watch made of German Submarine Steel

- Case and crown made of high-strength, seawater-resistant German Submarine Steel
- Tested based on European diving equipment standards and certified by DNV
- Waterproof and pressure-resistant to 50 bar (= 500 m water depth), certified by DNV
- Captive diver's bezel with minute ratcheting
- Diver's bezel made with TEGIMENT Technology and therefore especially scratch-resistant
- Crown at 4 o'clock to prevent pressure on the back of the hand
- Sapphire crystal glass
- Resistant to low pressure

· U50:

- Matt black dial

U50 DS:

- Limited to 1,000 pieces, dial with decorative grinding
- Case and bezel with TEGIMENT Technology and therefore especially scratch-resistant

U50 SDR:

- Matt black dial
- Diver's bezel with Black Hard Coating on a TEGIMENT Technology basis

• U50 S:

- Matt black dial
- Case made with Black Hard Coating on a TEGIMENT Technology basis





U212 (EZM 16) – solid, expandable stainlesssteel bracelet with folding safety clasp. Two-year guarantee, see page 156. (Case diameter: 47 mm)



U212 (EZM 16) - black silicone strap. Two-year guarantee, see page 156. (Case diameter: 47 mm)



DNV verifies and certifies the pressure resistance of our **U212** (EZM 16) to a diving depth of 1,000 metres and its temperature resistance and functionality in accordance with the European diving equipment standards ENZ50 and EN14143.



U212 (EZM 16) - luminous design.



U212 (EZM 16) - back view.

Large picture: **U212 (EZM 16)** - black silicone strap. Two-year guarantee, see page 156. (Case diameter: 47 mm)

Model U212 (EZM 16)

The mission timer made of German Submarine Steel

The U212 (EZM 16) is made of high-strength, seawater-resistant German Submarine Steel and is 47 mm in diameter. The technologies used make the U212 a robust and accurate instrument for professional diving. For example, Ar-Dehumidifying Technology ensures greater functional reliability and freedom from fogging. Temperature Resistance Technology guarantees the functional reliability of the watch in temperatures ranging from -45°C to +80°C. The surface of the captive diver's bezel with minute ratcheting has also been hardened using TEGIMENT Technology, making it especially scratch-resistant. As the clarity and optimum readability of our mission timers are generally important – especially in darkness or adverse conditions – the key features for recording the time are luminous.

- Case and crown made of high-strength, seawater-resistant German Submarine Steel
- -Tested based on European diving equipment standards and certified by DNV
- Waterproof and pressure-resistant to 100 bar (= 1,000 m water depth), certified by DNV
- Diver's bezel with TEGIMENT Technology and therefore especially scratch-resistant
- Captive diver's bezel with minute ratcheting
- Ar-Dehumidifying Technology, ensuring greater functional reliability and freedom from fogging
- Sapphire crystal glass
- Resistant to low pressure





UX (EZM 2B) – red silicone strap. Crown on right at 4 o'clock. Two-year guarantee, see page 156. (Case diameter: 44 mm)



UX SDR GSG 9 (EZM 2B) – black silicone strap. Crown on left at 10 oʻclock. Two-year guarantee, see page 156. (Case diameter: 44 mm)



UX S (EZM 2B) - solid, expandable stainless-steel bracelet and Black Hard Coating on a TEGIMENT Technology basis.
Technology basis.
Two-year guarantee, see page 156.
(Case diameter: 44 mm)

DNV verifies and certifies the pressure resistance of our **UX (EZM 2B) series** (diving depth of case: 12,000 m, movement: 5,000 m) and its temperature resistance and functionality in accordance with the European diving equipment standards EN250 and EN14143.



The **UX (EZM 2B)** is also readable underwater from every angle. A non-filled watch acts like a mirror underwater from an approximately 45° angle due to the total reflection.

Series UX (EZM 2B)

The mission timer for special units

The mission that made the special unit of the German Federal Police, GSG 9, famous: rescuing the hijacked "Landshut" aircraft on 18 October 1977 in Mogadishu. Just as legendary as the reputation of this maritime unit is the diving watch that they wear on their missions.

- Case and crown made of high-strength, seawater-resistant German Submarine Steel
- Tested based on European diving equipment standards and certified by DNV
- Pressure resistance of the movement to 5,000 m and of the case to 12,000 m, tested and certified by DNV
- Thanks to HYDRO Technology, reflection-free readability underwater from every angle and complete freedom from fogging
- Captive diver's bezel with minute ratcheting
- Diver's bezel made with TEGIMENT Technology and therefore especially scratch-resistant
- Sapphire crystal glass
- High-precision quartz movement, temperature-stabilised
- Functionally reliable from -20°C up to +60°C
- Resistant to low pressure

UX SDR/UX SDR GSG 9 (EZM 2B):

- Diver's bezel with Black Hard Coating on a TEGIMENT Technology basis
- · UX S/UX S GSG 9 (EZM 2B):
 - Case made with Black Hard Coating on a TEGIMENT Technology basis

Large picture:

UX GSG 9 (EZM 2B) – silicone strap. Crown on left at 10 o'clock. Two-year guarantee, see page 156. (Case diameter: 44 mm)



Classic Masterpieces and Frankfurt Financial District Watches

Our classic masterpieces are characterised by unique horological features that make each and every watch in this range highly individual. The 1739 Ag B is a good example. With its blue dial, appliqués meticulously attached by hand and polished Argentium case, it epitomises timeless design. Whichever watch you choose, the individual characteristics of these timepieces make them classic companions in a league of their own.

Our Frankfurt Financial District Watches are distinguished by their connection with the city of Frankfurt, the internationally renowned banking and stock exchange metropolis, where our company has been based since 1961. Our close affiliation with Frankfurt was first documented in 1999 with the Frankfurt Financial District Watch 6000. This watch would be the first in a series of models to enjoy great popularity beyond the city's borders – because every Frankfurt Financial District Watch has a distinctive feature. Take the Frankfurt Financial District Watch 6012 for example, which is distinguished by the SINN SZ06 movement and a real mother-of-pearl moon phase display.





1739 Ag B - fine grey Alcantara** strap. Two-year guarantee, see page 156. (Case diameter: 39 mm)





1739 Ag B – brown calf leather strap. Two-year guarantee, see page 156. (Case diameter: 39 mm)



1739 Ag B – black calf leather strap. Two-year guarantee, see page 156. (Case diameter: 39 mm)



1739 Ag B - back view



1739 - side view.

Model 1739 Ag B

Perfect elegance, in solid silver with oxidation protection

An inherent combination of watchmaking craftsmanship and distinctly traditional aesthetics defines the style of our 1739 Ag B model. The eyes are drawn to the electroplated blue dial exquisitely decorated with a sunburst finish. Reduced to a minimum, the design focuses on the essentials – the hour and minute display. We felt it was only logical to capture the elegance of this two-handed watch in a case made of special material. The 935 Argentium* silver alloy used here has a special advantage: rather than tarnishing and blackening like normal silver, Argentium* forms a protective germanium oxide surface layer. This layer considerably slows down the tarnishing process. Instead, a golden hue develops, which can be removed with an Argentium* care cloth.

- Case made of solid silver, polished
- Argentium* silver alloy protects against oxidation
- Electroplated blue dial with sunburst decoration
- Sapphire crystal glass
- Transparent case back made of sapphire crystal glass
- Appliqués, meticulously attached by hand
- Waterproof and pressure-resistant to 10 bar
- Resistant to low pressure





1739 St 1 4N – black calf leather strap. Two-year guarantee, see page 156. (Case diameter: 39 mm)



1736 St I 4N - brown calf leather strap. Two-year guarantee, see page 156. (Case diameter: 36 mm)



1739 St I S – black calf leather strap. Two-year guarantee, see page 156. (Case diameter: 39 mm)



1739 St I 4N - back view



1739 St I 4N - side view.

Models 1736 St I 4N, 1739 St I 4N and 1739 St I S Perfect elegance

Often it's details that turn an extraordinary watch into something exceptional. In the 1736 St I 4N and 1739 St I 4N it is the stylishly arranged golden hands, the appliqués, meticulously attached by hand and the silver electroplated dial with sunburst decoration – an interplay that creates a highly exquisite and elegant feel. Details that feature in both watches yet differ in size. For the 1739 St I 4N has a diameter of 39 mm, while the 1736 St I 4N has a diameter of 36 mm. At 39 mm in diameter, the 1739 St I S offers strikingly different features. Here it is the silver hands, the appliqués, meticulously attached by hand and the black dial with sunburst decoration that emphasise the timelessly classic design. All three models skilfully incorporate selected elements from previous styles, illustrating a sense of tradition. This is reinforced by the slightly curved, high-quality sapphire crystal.

- Case made of stainless steel, polished
- Sapphire crystal glass
- Transparent case back made of sapphire crystal glass
- Appliqués, meticulously attached by hand
- Waterproof and pressure-resistant to 10 bar
- Resistant to low pressure

· 1736 St I 4N and 1739 St I 4N:

- Silver electroplated dial, with sunburst decoration
- · 1739 St I S:
 - Electroplated black dial with sunburst decoration





1746 Porcelain – example of a dial with a family crest (custom dial motifs possible). Two-year guarantee, see page 156. (Case diameter: 42 mm)



1746 Classic – high-quality vitreous enamel dial and date display. Two-year guarantee, see page 156. (Case diameter: 42 mm)



1736 Classic – high-quality vitreous enamel dial and date display. Two-year guarantee, see page 156. (Case diameter: 36 mm)



1746 Porcelain with individual motif. Here the signature of Arthur Schopenhauer is handpainted on the dial, which is made from the finest quality porcelain.

(Case diameter: 42 mm)



Porcelain painter working on a dial with family crest.

Model 1736 Classic and Series 1746

Perfect elegance

A traditional watch design from the house of SINN, combining clearly contrasting black and white with sheer elegance and technical precision. A beautifully designed and elegant favourite for everyday use. The stylish porcelain dials of the 1746 Classic underline the individual personality of the wearer.

- Case made of stainless steel, polished
- Sapphire crystal glass
- Transparent case back made of sapphire crystal glass
- Exquisitely decorated movement
- Waterproof and pressure-resistant to 10 bar
- Resistant to low pressure

· 1746 Porcelain:

- Hand-painted dial made from the finest quality porcelain
- Three river landscapes and three cityscapes, each in the colours blue, purple and charcoal grey, and the municipal coat of arms of Frankfurt am Main
- Strictly limited to just 25 pieces per motif and colour; custom motifs available on request

· 1746 Classic:

- Case diameter: 42 mm

1736 Classic:

- Case diameter: 36 mm





1746 Heimat – blue calf leather strap. Two-year guarantee, see page 156. (Case diameter: 42 mm)



Detailed view of the exquisite, silver-white relief dial with its three-dimensional surface structure.



1746 Heimat – back view.



1746 Heimat - side view.

1746 Heimat

Elegance with a relief dial

Model 1746 Heimat pays homage to our home city, Frankfurt am Main. The extremely fine rhodium-coated relief dial is inspired by the traditional diamond pattern of Frankfurt's popular cider glasses, also known as *Gerippte*. The three-dimensional diamond pattern creates an incredibly vibrant interplay of light and shade on the cider glasses. Upon closer inspection, the relief on the dial appears just as vibrant and three-dimensional, with a wide range of surface characteristics – from polished to matt silk. The effect is a result of the electroforming technique used in the production process. This method allows complex three-dimensional surface structures to be achieved with a high degree of precision. The relief dial is coated with rhodium, a precious metal similar to platinum, which gives the dial an exquisite silver-white shine.

- Case made of stainless steel, polished
- Relief dial
- Sapphire crystal glass
- Transparent case back made of sapphire crystal glass
- Waterproof and pressure-resistant to 10 bar
- Resistant to low pressure





The Frankfurt Financial District Watch in rose gold – black alligator leather strap. Five-year guarantee, see page 156. (Case diameter: 38.5 mm)



The Frankfurt Financial District Watch 6000 – black calfskin strap. Two-year guarantee, see page 156. (Case diameter: 38.5 mm)



The Frankfurt Financial District Watch 6099 – fine-link stainless-steel bracelet and polished stainless-steel case. Two-year guarantee, see page 156. (Case diameter: 41.5 mm)



The models 6000 and 6099 each come in a fine wooden case with a solid stainless-steel bracelet, leather strap (model 6000 Rose Gold has a brown and black alligator leather strap), a band replacement tool, spare spring bars, an Eschenbach watchmaker's magnifying glass, a care cloth and a brochure.

The Frankfurt Financial District Watch Series 6000 and 6099

- Exquisitely decorated movement
- Sapphire crystal glass
- Transparent case back made of sapphire crystal glass
- Displays three time zones on a 12-hour basis
- Rotor engraving of the Frankfurt skyline
- Waterproof and pressure-resistant to 10 bar
- Resistant to low pressure

· 6000 Rose Gold:

- Case made of 18-carat rose gold
- DIAPAL the lubricant-free anchor escapement

· 6000:

- Case made of stainless steel, polished

• 6099:

- Case made of stainless steel, polished





The white-gold anniversary version of our Frankfurt Financial District Watch and the platinum Frankfurt Financial District Watch won the coveted "Goldene Unruh" in 2006 and 2012 respectively.

Large picture:
The Frankfurt Financial District Watch in rose gold –
brown alligator leather strap. Five-year guarantee, see
page 156.

(Case diameter: 38.5 mm)

97





The Financial District Watch 6012 with moon phase and full calendar display - electroplated black dial we use real mother-of-pearl. Due to the special, set with rhodium-plated appliqués. Black calfskin strap. Two-year guarantee, see page 156. (Case diameter: 41.5 mm)



For the moon discs on the moon phase display naturally occurring surface structure, motherof-pearl creates a mattiridescent finish, which enhances the elegance of the watch.



The watch comes in a fine wooden case with a solid stainless-steel bracelet, calf leather strap, a band replacement tool, spare spring bars, an Eschenbach watchmaker's magnifying glass, a care cloth and a



The Frankfurt Financial District Watch 6012 with moon phase and full calendar display. Luminous design.



The Frankfurt Financial District Watch 6012 with moon phase and full calendar display. Back view

The Frankfurt Financial District Watch with moon phase and full calendar display Model 6012

Model 6012 is the first to feature the Sinn SZ06 movement. Thanks to this complex factory modification, we were able to combine the stopwatch minute counter with 60-second scale and the full calendar display with a moon phase display. This also ensures optimum readability, as the stopwatch minutes from 0 to 60 can easily be read. For the moon discs on the moon phase display we use real mother-of-pearl. Due to the special, naturally occurring surface structure, mother-of-pearl creates a matt iridescent finish, which enhances the elegance of the watch.

- Sinn SZ06 movement with a 60-second scale for the stopwatch minute, moon phase and full calendar display
- Moon phase display with real mother-of-pearl moon discs
- Centre-mounted date hand, day of the week and month display
- Sapphire crystal glass
- Transparent case back made of sapphire crystal glass
- Case made of stainless steel, polished
- Exquisitely decorated movement with rotor engraving of the Frankfurt skyline
- Resistant to low pressure
- Waterproof and pressure-resistant to 10 bar

Large picture:





The Financial District Watch 6052 with calendar week display – black calf leather strap. Electroplated black dial set with rhodium-plated appliqués.

Two-year guarantee, see page 156. (Case diameter: 41.5 mm)



The Financial District Watch 6052 with calendar week display – fine-link stainless-steel bracelet. Electroplated black dial set with

rhodium-plated appliqués. Two-year guarantee, see page 156. (Case diameter: 41.5 mm)



The watch comes in a fine wooden case with a solid stainless-steel bracelet, calf leather strap, a band replacement tool, spare spring bars, an Eschenbach watchmaker's magnifying glass, a care cloth and a brochure.



The **Frankfurt Financial District Watch 6052** with calendar week display. Luminous design.

The exquisitely decorated movement with the blued screws is clearly visible through the sapphire crystal glass.

The Frankfurt Financial District Watch with calendar week display Model 6052

Each Frankfurt Financial District Watch is distinguished by its individual characteristics. And model 6052 is no different. For the traditional chronograph boasts a handy calendar week display – the first special function of its kind to be used in a SINN watch. In addition to the calendar week, the dial also displays the day of the week and month, making the 6052 the ideal watch for organising business appointments and planning activities – without the need for a calendar. This special function is enabled by the SZ03, a movement modification designed and implemented by us. This movement also boasts a 60-minute – rather than the standard 30-minute – counter at 12 o'clock.

- SINN SZ03 chronograph movement with 60-minute stopwatch display
- Calendar week display
- Centre-mounted date hand, weekday and month display
- Case made of stainless steel, polished
- Black electroplated dial with rhodium-plated appliqués
- Exquisitely decorated movement with rotor engraved Frankfurt skyline
- Sapphire crystal glass
- Transparent case back made of sapphire crystal glass
- Waterproof and pressure-resistant to 10 bar
- Resistant to low pressure





The Frankfurt World Time Watch 6060 B blue cowhide strap. Two-year guarantee, see page 156. (Case diameter: 38.5 mm)



The Frankfurt World Time Watch 6060 gracefully designed solid bracelet. Two-year guarantee, see page 156. (Case diameter: 38.5 mm)



The Frankfurt World Time Watch 6096 black calf leather strap. Electroplated black dial set with rhodium-plated appliqués. Two-year guarantee, see page 156. (Case diameter: 41.5 mm)



Luminous design.

The Frankfurt World Time Watch 6060 B.

The exquisitely decorated movement with the blued screws is clearly visible through the sapphire crystal glass.

The Frankfurt World Time Watches Models 6060/6060 B/6096

These timepieces are characterised by three simultaneously readable time zones. The exquisitely decorated movement with bull and bear rotor engraving can be admired through the transparent case back made of sapphire crystal glass with anti-reflective coating on the inside. The polished stainless-steel case houses a high-quality sunburst dial in either black (6060, 6096) or blue (6060 B). The appliqués are finished with luminous paint, as are the hour and minute hands. These models come in a fine wooden case with a gracefully designed solid bracelet, a leather strap and accessories.

- Case made of stainless steel, polished
- Displays three time zones on a 12- and 24-hour basis
- Sapphire crystal glass
- Transparent case back made of sapphire crystal glass
- Exquisitely decorated movement with bull and bear rotor engraving
- Waterproof and pressure-resistant to 10 bar
- Resistant to low pressure

· 6060 B:

- Electroplated blue dial with sunburst decoration

· 6060/6096:

- Electroplated black dial with sunburst decoration





The Frankfurt Financial District Watch 6068 B – fine-link stainless-steel bracelet. Two-year guarantee, see page 156. (Case diameter: 38.5 mm)



The Frankfurt Financial District Watch 6068 – black calf leather strap. Electroplated black dial set with rhodium-plated appliqués. Two-year guarantee, see page 156. (Case diameter: 38.5 mm)



Models 6068 and 6068 B each come in a fine wooden case with a solid bracelet, a leather strap, a band replacement tool, spare spring bars, an Eschenbach watchmaker's loupe, a care cloth and a brochure.



The **Frankfurt Financial District Watch 6068 B.** Luminous design.



The exquisitely decorated movement with the blued screws is clearly visible through the sapphire crystal glass.

The Frankfurt Financial District Watch Models 6068 and 6068 B

These watches display two time zones on a 12-hour basis. The polished stainless-steel case features crystal made of sapphire crystal and contains a black (6068) or blue (6068 B) dial with a sunburst finish. It is rounded off by appliqués which are coated with luminous paint, as are the hour and minute hands. The bull and bear rotor engraving can be admired through the transparent case back made of sapphire crystal glass.

- Displays two time zones on a 12-hour basis
- Smart wooden case with a solid stainless-steel bracelet and calf leather strap
- Case made of stainless steel, polished
- Sapphire crystal glass
- Transparent case back made of sapphire crystal glass
- Exquisitely decorated movement with bull and bear rotor engraving
- Waterproof and pressure-resistant to 10 bar
- Resistant to low pressure
- · 6068
 - Electroplated black dial with sunburst decoration
- · 6068 B:
 - Electroplated blue dial with sunburst decoration



6200 WG Meisterbund I

The 55-piece limited-edition watch with hand-wound calibre









The 6200 WG Meisterbund I comes in a fine wooden case (pictured right) with an alligator leather strap, available in the colours mocha (pictured left) or black (pictured centre). Also contained in the case is a brochure, an Eschenbach watchmaker's loupe, a care cloth and a warranty card. Watch diameter: 40 mm. Two-year quarantee, see page 156.



Back view of the $6200\,\mathrm{WG}$ Meisterbund I with engraved limited-edition number.

6200 WG Meisterbund I

The 55-piece limited-edition watch with hand-wound calibre

- Sinn Spezialuhren & UWD & SUG = Meisterbund, or cooperation of master craftsmen
- Limited to 55 pieces
- Case made of 18-carat white gold, polished, with satinised sides
- Fine, exquisitely decorated hand-wound calibre UWD 33.1
- Stop-seconds function
- Flying barrel
- Anthracite electroplated dial, with guilloche
- Sapphire crystal glass
- Transparent case back made of sapphire crystal glass
- Waterproof and pressure-resistant to 10 bar
- Resistant to low pressure





The finely satinised sides of the **6200 WG Meisterbund I** with "MEISTERBUND" engraving.

The wonderful, 55-piece limited-edition 6200 WG Meisterbund I seamlessly follows on from the hugely successful rose gold 6200 Meisterbund I – in many ways an extraordinary watch that set several milestones. These two masterpieces mark the celebration of the company's 55th anniversary in 2016.

"Scorn not the Masters, I bid you, and honour their art!"

This is a passage taken from the final address of Hans Sachs in the well-known opera "The Mastersingers of Nuremberg". Three "masters of their trade" have also come together for the 6200 WG Meisterbund I. For the "Meisterbund" edition is the result of a collaboration between Uhren-Werke-Dresden (UWD), Sächsische Uhrentechnologie GmbH (SUG) from Glashütte and Sinn Spezialuhren.



The fine, exquisitely decorated hand-wound calibre UWD 33.1 has a power reserve of 55 hours. The six eccentric weights on the balance rim for precisely balancing the balance system are also clearly visible. In accordance with the functional principle of a swan-neck regulator, the regulator system enables zero-play precision adjustment and isochronal adjustment of the watch.

SUG is responsible for building and manufacturing the case made of 18-carat white gold, which proudly bears the "MEISTERBUND" engraving on the side – a distinguishing feature of our Meisterbund series.

Sinn Spezialuhren shapes the "face" of the 6200 WG Meisterbund I, which is in keeping with our traditional masterpieces, thanks to a guilloché and anthracite electroplated dial, while being suitable for everyday use. The 6200 WG Meisterbund I is thus also pressure-resistant to 10 bar and resistant to low pressure.

UWD is responsible for manufacturing the high-quality hand-wound calibre UWD 33.1, which proved hugely successful in the rose gold edition, where it was used for the first time in series production.

The fact that the watch is built and produced in Germany and that all key watch components are made in Germany is what truly makes the "Meisterbund" edition something special. We are proud of the fact that the "Made in Germany" seal of quality is held in particularly high regard amongst many watch experts. This confirms that we were right to focus on harnessing the innovative strength and expertise of German craftsmanship and engineering to create the "Meisterbund" edition.

Hand-wound calibre UWD 33.1

The centrepiece is the fine, exquisitely decorated hand-wound calibre UWD 33.1 made of nickel silver – a contemporary technical interpretation of a design and development evoking a traditional sense of quality. With a flying barrel supported on one side, it is a prime example of precision and functional robustness while also expressing watchmaking craftsmanship at its best.

The movement can be adjusted by shifting the eccentric weights in the balance system. This also offsets the imbalance in the complete oscillating system of the watch. The regulator system, on the other hand, provides a convenient means of precision adjustment and beat setting adjustment. Also noteworthy is the fact that all parts of the movement are exquisitely decorated. Plates and cocks are characterised by matt, diamond-planed edges. The combination of matt and polished surfaces gives the movement an exquisite feel, while the diamond profiles underscore the high level of quality. The impression of a consistently designed watch is completed by the fact that the manufactured movement, made of nickel silver and with a diameter of 33 mm, so harmoniously fits into the white gold case which has a diameter of 40 mm.

In terms of style and design, the 6200 WG Meisterbund I lives up to its name. It is thus a worthy successor, skilfully continuing our Meisterbund series in the spirit of traditional watchmaking craftsmanship.



Ladies' Watches

As well as being decorative, our ladies' watches reflect the wearer's personality – partly because the timepieces are designed with elegance and feminine aesthetics in mind. These timepieces are not just beautiful: they also boast features such as electromagnetic pulse shielding, as in the case of the 434 St GG Mother-of-Pearl W model with its decorative bezel of 18-carat yellow gold. As all of our timepieces are also waterproof, resistant to low pressure and anti-magnetic, they tick all the right boxes for a ladies' watch from Sinn Spezialuhren.





434 St B - bluish grey calf leather strap. Electroplated blue dial, with sunburst decoration.

Two-year guarantee, see page 156. (Case diameter: 34 mm)



434 St GG B - white calf leather strap. Electroplated blue dial, with sunburst decoration.

Two-year guarantee, see page 156. (Case diameter: 34 mm)



434 TW68 WG B - black calf leather strap. Electroplated blue dial, with sunburst decoration.

Two-year guarantee, see page 156. (Case diameter: 34 mm)



Back view of the 434 St B.



Side view of the 434 St B.

Series 434 B

The elegant ladies' watch with [Q] Technology

As a daily watch wearer, you count on your watch being both reliable and safe to wear. Series 434 B is a combination of both; the electromagnetic radiation is minimised by the movement. See page 137 for more details. These watches also feature a temperature-stabilised chronometer precision movement. Discover the extraordinary character of these watches too, and choose between a number of different high-quality designs. A new level of exclusivity is evoked by the model, which features a fine, decorative bezel of 18-carat yellow gold. Understated elegance is created by the appliqués, which have been meticulously attached by hand to show the hours.

- Electroplated blue dial, with sunburst decoration
- Classic, elegant stainless-steel case
- Shielding of the electromagnetic pulses emitted by the quartz movement
- Appliqués, meticulously attached by hand
- High-precision quartz movement, temperature-stabilised
- Sapphire crystal glass
- Waterproof and pressure-resistant to 10 bar
- Resistant to low pressure
- 434 St GG B: Decorative bezel made of 18-carat yellow gold
- 434 TW68 WG B: Decorative bezel of 18-carat white gold with 68 diamonds (0.54 ct) in Top Wesselton quality

Large picture:

434 TW68 WG B – fine-link stainless-steel bracelet. Electroplated blue dial with sunburst decoration. Two-year guarantee, see page 156. (Case diameter: 34 mm)





434 TW68 WG Mother-of-Pearl W - bluish grey calf leather strap and shimmering white mother-of-pearl dial. Two-year guarantee, see page 156. (Case diameter: 34 mm)



434 TW68 WG S - white calf leather strap. Electroplated black dial with sunburst decoration. Two-year guarantee, see page 156. (Case diameter: 34 mm)



434 TW68 WG S – fine-link stainless-steel bracelet. Electroplated black dial with sunburst decoration. Two-year guarantee, see page 156. (Case diameter: 34 mm)



Back view of the 434 TW68 WG S.



Clearly visible: the decorative bezel of 18-carat white gold encased in 68 precious diamonds in Top Wesselton quality.

Series 434 TW68

The elegant ladies' watch with [Q] Technology

These ladies' watches are real pieces of jewellery, perfect in combination with many items of clothing. The dial of two of the models is encased in a fine decorative bezel of 18-carat white gold with 68 precious diamonds in Top Wesselton quality, providing an elegant touch of finesse. And to make finding the perfect watch even easier for the wearer, there are now two stylish dial designs to choose from. Another unique design feature is created by the various appliqués, which have been meticulously attached by hand to show the hours. Particularly eye-catching are the hours with rhodiumplated Roman numerals. The [Q] symbol on the dial confirms the minimised electromagnetic radiation emitted by the movement. To find out more about this topic, please refer to page 137.

- Decorative bezel of 18-carat white gold with 68 diamonds (0.54 ct) in Top Wesselton quality
- Classic, elegant stainless-steel case
- Shielding of the electromagnetic pulses emitted by the quartz movement
- Appliqués, meticulously attached by hand
- High-precision quartz movement, temperature-stabilised
- Sapphire crystal glass
- Waterproof and pressure-resistant to 10 bar
- Resistant to low pressure
- 434 TW68 WG S: Electroplated black dial, with sunburst decoration
- · 434 TW68 WG Mother-of-Pearl W: Shimmering white mother-of-pearl dial

Large picture:
434 TW68 WG S black calf leather strap.
434 TW68 WG Mother-of-Pearl W brown calf leather strap. Two-year guarantee,
see page 156.
(Case diameter: 34 mm)





434 St S – black calf leather strap. Electroplated black dial with sunburst decoration. Two-year guarantee, see page 156. (Case diameter: 34 mm)



434 St Mother-of-Pearl W - fine-link stainless-steel bracelet and shimmering white mother-of-pearl dial. Two-year guarantee, see page 156. (Case diameter: 34 mm)



434 St Mother-of-Pearl W - brown calf leather strap and shimmering white mother-of-pearl dial. Two-year guarantee, see page 156. (Case diameter: 34 mm)



Back view of the 434 St S.



Side view of the 434 St GG S.

Series 434 St

The stylish ladies' watch with [Q] Technology

As a daily watch wearer, you count on your watch being not only reliable but also safe to wear. Our 434 St series fulfils both requirements, minimising the electromagnetic radiation emitted by the movement. To find out more about this topic, please refer to page 137. Discover the extraordinary character of these watches, too. Choose between four high-quality designs. A whole new level of exclusivity is evoked by the two models featuring a fine, decorative bezel of 18-carat yellow gold. Understated elegance is created by the various appliqués, which have been meticulously attached by hand to show the hours. Particularly eye-catching are the hours with rhodium-plated Roman numerals.

- Decorative bezel of 18-carat yellow gold (434 St GG S and 434 St GG Mother-of-Pearl W)
- Classic, elegant stainless-steel case
- Shielding of the electromagnetic pulses emitted by the quartz movement
- Appliqués, meticulously attached by hand
- High-precision quartz movement, temperature-stabilised
- Sapphire crystal glass
- Waterproof and pressure-resistant to 10 bar
- Resistant to low pressure
- 434 St GG S: Electroplated black dial, with sunburst decoration
- 434 St GG Mother-of-Pearl W: Shimmering white mother-of-pearl dial
- 434 St S: Electroplated black dial, with sunburst decoration
- · 434 St Mother-of-Pearl W: Shimmering white mother-of-pearl dial

Large picture:

434 St GG Mother-of-Pearl W – white calf leather strap.

434 St GG S – bluish grey calf leather strap. Two-year guarantee, see page 156. (Case diameter: 34 mm)





456 St GG Mother-of-Pearl W – shimmering white mother-of-pearl dial and decorative 18-carat-gold bezel. Two-year guarantee, see page 156.

(Case diameter: 28 mm, fig.: 1:1)



456 TW12 - 18-carat-gold bezel and 12 Top Wesselton diamonds on the dial. Two-year guarantee, see page 156. (Case diameter: 28 mm, fig.: 1:1)



456 TW70 GG – fine-link bracelet. 18-carat-gold bezel and 70 Top Wesselton diamonds. Two-year guarantee, see page 156. (Case diameter: 28 mm, fig.: 1:1)



Back view of the **456 TW70 GG**. (Case diameter: 28 mm, fig.: 1:1)

Series 456

The classic ladies' watch

These SINN timepieces are luxury for the wrist. Set with glamorous diamonds. A special treat for afficionados who love exclusive designs. Timelessly elegant. Yet still suitable for everyday use.

- Mechanical movement with self-winding mechanism
- Electroplated black dial
- Case made of stainless steel, polished
- Sapphire crystal glass
- Waterproof and pressure-resistant to 20 bar
- Resistant to low pressure

· 456 TW70 GG:

 Decorative bezel made of 18-carat yellow gold and 70 diamonds (0.63 carat) in Top Wesselton quality (58 diamonds in the decorative bezel and 12 diamonds on the dial)

· 456 TW70 WG:

 Decorative bezel made of 18-carat white gold and 70 diamonds (0.63 carat) in Top Wesselton quality (58 diamonds in the decorative bezel and 12 diamonds on the dial)

· 456 TW12:

 Decorative bezel made of 18-carat yellow gold and 12 diamonds (0.108 carat) in Top Wesselton quality on the dial

· 456 St GG Mother-of-Pearl W:

- Decorative bezel made of 18-carat yellow gold



Clearly visible: the high-quality, individually set Top Wesselton diamonds.

Large picture: 456 TW70 WG – 18-carat-white-gold bezel and 70 Top Wesselton diamonds. Two-year guarantee, see page 156. (Case diameter: 28 mm)



Re	ports,	technol	logies	and	mission	timers
	,					

Whether providing a detailed description of our technologies, reporting on interesting topics such as the company headquarters in Sossenheim and the DIN 8330 pilot watches, or clearly illustrating our mission timers, the following pages offer a wealth of information to help you gain a deeper insight into our company.

Frankfurt am Main - Hometown of Sinn Spezialuhren:

Company headquarters in Sossenheim – Branch in Römerberg square Two company-owned points of contact in Frankfurt am Main

With our headquarters in Frankfurt's Sossenheim district and the SINN Niederlassung Römerberg branch in the heart of Frankfurt, we intend to remain true to our roots in Frankfurt am Main in future. After all, the name of the city adorns the dial of many of our watches. We also aim to continue to do our best to make sure the financial hub is perceived as a renowned watchmaking hub beyond the city's borders, too.

Headquarters in Sossenheim

On 1 September 2017, we moved into our company headquarters at Wilhelm-Fay-Strasse 21 in Frankfurt's Sossenheim district. This is where we develop and produce our high-quality mechanical timepieces. Here you can buy your SINN watch directly in our generously sized sales- and showroom, and browse through the entire collection shown in our current catalogue. Our staff will be only too happy to offer advice and deal with any customer service issues. Customers also have the opportunity to admire previous models from Sinn Spezialuhren.



On 1 September 2017 our company moved into its new headquarters at Wilhelm-Fay-Strasse 21 in Frankfurt's Sossenheim district.



The new, generously sized sales- and showroom at our headquarters in Frankfurt's Sossenheim district. Here you can get personal advice and take the time to choose your SINN watch.



Our branch in the historic 'Haus zum Goldenen Rad'. Reconstructed in 1955, the original building dates back some 800 years.

Branch in Frankfurt's Römerberg square

Our branch in Frankfurt's Römerberg square offers our customers in Frankfurt am Main an attractive alternative to our salesroom in Sossenheim and the opportunity to purchase a SINN watch in person. Customers travelling from outside the city can purchase their SINN watch on a stroll around the city – without even having to leave the city centre.



View of the salesroom at our Römerberg branch. Besides offering advice and handling sales, our staff also deal with any customer service issues.

Sächsische Uhrentechnologie GmbH (SUG), Glashütte Factory for high-tech watch cases

Toward the end of the tour of the German Horological Museum in Glashütte, visitors find themselves in a brightly lit room containing a handful of white display cabinets in which renowned local clock and watchmakers display a selection of their wares. Information panels point out the special features of each model and company. While examining the items on display, visitors sometimes do a double take – one of the companies being showcased produces technologically sophisticated cases, in contrast to the finished luxury watches made by the other exhibitors. The company in question is Sächsische Uhrentechnologie GmbH (SUG) based in Glashütte, a company that has earned its place among the other historical manufacturers presented at the museum.

The move to independence

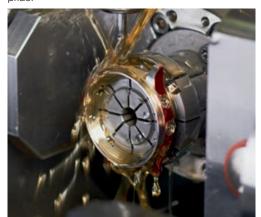
What factors led to the founding of SUG? Having worked for Glashütter Uhrenbetriebe, Ronald Boldt was also familiar with the suppliers of watch cases. He observed two things: that the market was relatively small and manageable, and that there was room for improvement in terms of production quality. Why not do it himself, he thought. In 1999, Ronald Boldt set out on the road to entrepreneurial freedom with two partners one of which was Lothar Schmidt. As so often in life, this was the result of a fortunate coincidence: Ronald Boldt was looking for business partners to help establish a new company, while Lothar Schmidt was looking for a new supplier of high-quality watch cases for SINN. Since the two men had met before in the tight-knit horological community of Glashütte, they wasted no time in discussing their options. And so the cornerstone was laid. When a disastrous flood destroyed SUG's premises in 2002, Lothar Schmidt acquired the shares of the third partner, further cementing the already successful partnership between Ronald Boldt and Lothar Schmidt. Today, Ronald Boldt regards the alliance as exemplary and views the business relationship as one which both sides continue to care about passionately. After all, both are engineers who speak the same language and who get along well - professionally and personally. Ronald Boldt has meanwhile left the company to enjoy his well-earned retirement. His son Daniel, who has been working for the company for years, has taken his place as sole managing director (see box on page 127).



Daniel Boldt casting a critical eye over a case. SUG also offers small-scale production runs, including design, CNC production, finishing and assembly. The production chain ends with a completely assembled case. All products are manufactured with the utmost precision and guarantee the highest quality.

Flexible, start-to-finish manufacturing of small production runs

And so SUG has supplied SINN with watch cases ever since being founded. The small Saxon company has grown from its humble origins into one of the leading manufacturers in the field. In terms of finding and implementing the best solutions, SUG's quality and production processes are on a technological par with those of the best manufacturers in the business anywhere in Europe! This is evidenced by the list of renowned watchmakers that entrust their production secrets to SUG and commission the company to manufacture watch cases for them. SUG's success is a monument to the outstanding expertise the company has accrued over the years, and to its proven ability to come up with unique solutions, again and again. Another advantage of the company is its ability to provide extremely flexible, start-to-finish manufacturing of small production runs in premium quality, including design, CNC machining, finishing and assembly. The result is a finished watch case assembled completely to the desired specifications. Being able to perform tasks other manufacturers would balk at requires not only experience, but also creativity and passion - all of which are in ample supply at SUG. The company has succeeded in taking even the most demanding watch case designs through to series production readiness. "We are not an easy act to follow," says Ronald Boldt with pride.



Machining a watch case using a state-of-the-art CNC machine.

A job for goldsmiths and toolmakers

In other words, there are no limits to what his employees can make. And SINN cases are distinguished by their typical characteristics. They comprise individual components such as push-pieces, crowns, bezels, seals, backs, screws and springs, and are three-dimensional structures made of stainless steel, titanium, gold or - in the case of SINN diver's watches - submarine steel. That requires specially developed tools and technologies - and not only for the manufacturing process. Watch cases are also characterised by their need to meet both aesthetic and technological demands. Ronald Boldt describes it aptly: "Making a watch case requires you to be both a goldsmith and a toolmaker." The first step in this symbiosis of workmanship involves creating a production-ready, photorealistic 3D design on the basis of the specifications. After fine-tuning and approving the design, Ronald Boldt prepares the sets of drawings for the individual components and the tools that will be used to complete the second step in the production process. "This is value creation in the truest sense of the word. You take a workpiece - a rod, disc or circular blank - and lathe and mill it to create the finished components." The subsequent third step involves what he calls "artistic handiwork" - the finishing process, i.e. arinding and polishing the surface of the case. "The results must be outstanding, because if they are not outstanding, they are rejected," he says in reference to the extremely high quality standards that leave no room for compromise. Finally, the individual components are assembled to create the finished product. The completed cases are then tested for pressure and water resistance and sent to SINN. The next step in the process of creating a high-quality special watch is carried out in Frankfurt am Main. It involves not only assembling and installing the movement, dial, hands and strap/bracelet. but above all integrating the SINN technologies.

SINN cases - a creative challenge

Each SINN case is given an individual quality assurance number, making it a unique specimen that must be water-resistant and protect the sensitive interior workings from dust and impact after assembly. But there is an additional element involved which, according to Ronald Boldt, "presents an ongoing creative challenge." He is referring to the fact that SUG also manufactures cases for the pilot's and diver's watches, i.e. models which SINN has specially developed for use by professionals. They feature such technologies as HYDRO, Special Oil, Ar-Dehumidifying Technology, DIAPAL, TEGIMENT and Magnetic Field Protection - as well as extras like captive bezels and high-pressure resistance. And all of these technical features that are so characteristic of SINN watches place enormous demands on the construction and manufacturing of the cases. There are no off-thepeg solutions to these difficult tasks. Which means the SUG staff must constantly be searching for new methods and approaches. "This is an area where SINN Spezialuhren lives up to its name - these are truly 'special watches'," says Ronald Boldt. Take the U2 diving watch, for example: what other manufacturer is called upon to make a watch case out of submarine steel, a material that is scarcely ever used for watches? And the case must be capable of integrating Ar-Dehumidifying Technology and Special Oil, and it must fulfil the stringent testing requirements of Germanischer Lloyd in terms of pressure resistance, temperature resistance and functionality.

What makes a watch a "special watch"

It is therefore crucial for SINN watch cases to fulfil these technical demands. In addition to protecting the movement, the case also has to ensure smooth operation of the watch's various technological features. And there is a further factor: the ideas behind the technologies are realised in two important steps, namely the engineering design at the drafting table and the actual production on the CNC machine. In other words, it is the cases made by SUG in collaboration with the SINN development engineers that make SINN watches "special watches". "Many of the technologies in SINN watches are made possible by the special construction of the watch case," explains Ronald Boldt, Maanetic Field Protection, for example, requires the use of special materials developed to provide the particular characteristics required by the case. Of course, he is not revealing what those traits are.

From the idea through to production readiness



The utmost precision is required when pressing in the sapphire crystal



Two generations of SUG: under the leadership of company founder Ronald Boldt (left), the company has grown from a three-man operation into one of Europe's most renowned watch case manufacturers. Since his departure, his son Daniel has been successfully running the business.

The development of the D3 System is a good example of the process from the initial concept by SINN engineers to series production of the case by SUG. This horological innovation creates a seamless seal by inserting the push-piece pins and crown shafts directly in a specially finished drill hole in the case (the name D3 comes from "Direkt Doppel Dichtend", the German words for "direct double sealing"). The D3 System permits the crown and push-piece to be integrated in the case, providing reliable protection from lateral impact and the penetration of dust or moisture. "The D3 System is a simple and effective sealing method that is both reliable and easy to assemble and service. It provides a better seal because it has fewer transition points between the interior and the exterior. But actually realising and implementing this solution was a real challenge in terms of design and production," Boldt explains.

A brand in case manufacture

SUG has now made a name for itself in the watchmaking industry and is regarded as a recognised brand in case manufacturing. The products created with the utmost precision are considered proof of outstanding quality, especially amongst industry experts. For Ronald Boldt, this recognition is the result of years of consistently good work. "It is very important that industry experts know who we are. That these experts are familiar with and value our work and trust that we can handle virtually any case-making task." It is therefore only fitting that SUG is featured in a display case at the German Horological Museum in Glashütte, where visitors learn what the company stands for - technologically sophisticated cases and first-class precision engineering from one of Germany's most traditional watchmaking regions.



During final assembly, the individual components are pieced together to form complete cases, as shown here by the EZM 7 mission timer for the fire service.

Ronald Boldt, born in 1947, completed his vocational training in mechanical engineering in Leipzig before earning a degree (Dipl.-Ing.) in precision engineering at the Technical University Dresden. From 1977 to 1989 he worked as a design engineer for special machinery at VEB Glashütter Uhrenbetriebe (GUB). Beginning in 1990, he served as the company's head design engineer and authorised signatory for the technology division, and was also responsible for technology and quality assurance. In December 1998, together with the owner of Sinn Spezialuhren, Lothar Schmidt (Dipl.-Ing.), he co-founded SUG, of which he has been co-owner and managing director since 1 April 1999. Ronald Boldt has meanwhile retired. Provisions have already been made to ensure the company continues on its successful course: son Daniel Boldt, born in 1975, has been with the company since its foundation. After completing a dual course of study in industrial engineering at the training centre of the Dresden Chamber of Industry and Commerce, he went on to complete his practical training at SUG. Since 1 September 2012, he has been managing director of the company, in particular managing the commercial side of things, as well as production planning and control. Upon his father's retirement he assumed sole responsibility for SUG.

The current design awards



1800 S GG DAMASZENER receives Excellent Product Design Award 2023

Our model 1800 S GG DAMASZENER receives the 'Excellent Product Design' award of the German Design Awards. For the timepiece, which is limited to 100 pieces, we use genuine fire-welded Damascus steel, which, with its distinctive and unique grain, gives the noble watch its own unmistakable identity.



Red Dot Award 2022 for the model 1739 Ag B

In the category 'Product Design', three watches from Sinn Spezialuhren have already won a Red Dot Award in the past. The fact that the model 1739 Ag B was also able to withstand the strict judgement of the jury is clear proof of its excellent design quality.



717 receives Excellent Product Design Award 2022 and iF Design Award 2022

Two awards for outstanding design: the 717 on-board chronograph, honoured at the German Design Award and iF Design Award for consistent design concept. A fascinating timepiece that stylishly connects the past with the future and perfectly embodies our brand DNA.



103 Classic 12: Winner of the 'Golden Balance 2022' and the Capital Watch Award 2021 up to 5,000 Euros

In the election for the 'Golden Balance 2022' our model 103 Classic 12 reaches the 1st place in the category B. In 2021 our model 103 Classic 12 takes first place in the Capital Watch Award in the category up to 5,000 euros.



Red Dot Award: Product Design 2021 for the 105 St Sa UTC

According to the judges, the 105 St Sa UTC twins striking design features with a high level of functionality. Its sporty design and practical features make this a highly versatile timepiece.



104 St Sa I A: German Desian Award 2021 winner

The outstanding design of the 104 St Sa I A model won it an award in the category "Excellent Product Design 2021". This classic pilot watch is hallmarked by a clearly structured appearance and good readability. With its sunburst decoration, the anthracite-coloured dial underscores the watch's timeless quality.



The Chronograph 936 wins the Red Dot Product Design Award 2020

The 936 impressed the judges with its robustness, useful features and consistent dial design devoted to clarify. The hour and minute hands are rhodium-coated and matt-brushed. Meanwhile, the seconds hand adds a subtle dash of red underneath the polished alass rim.



The HUNTING WATCH 3006: winner of the German Design Award 2020

Impressive, well thought-out features and practical materials make this ideal for the modern hunter. By day, it is a dress watch with a stylish strap, dark green dial and hardened steel case. By night, it becomes a hunter's tool with luminous hands, time segments and a moon phase display.



The EZM 12 scoops the Red Dot Award 2019 and the German Design Award 2020

The Red Dot Award judges praised the excellent design quality and outstanding product design, also commending the functional execution of the watch's special features for emergency doctors. The EZM 12 was awarded the German Design Award for 'Excellent Product Design 2020'.



Goldene Unruh 2010 award for the 900 PILOT Our 900 PILOT took first place in the Goldene Unruh competition.



Goldene Unruh 2010 and 2008 award for the 6100 REGULATEUR rose gold

Our 6100 REGULATEUR rose gold took first place in the Goldene Unruh competition 2010 and 2008.



Goldene Unruh 2006 award for the white gold Frankfurt Financial District Watch

Our white gold Frankfurt Financial District Watch took first place in the Goldene Unruh competition.

High-quality mechanical movements

Quality manufacturers guarantee precision and reliability

In addition to technology, the heart of any SINN watch is the fascinating mechanical movement. This always guarantees, for example, the accurate display of the current time, elapsed time or date. The movement thus plays an elementary role. The demands placed on the intricate technology are therefore extremely high. The movements must function precisely and reliably in addition to being well engineered, and provide outstanding accuracy. They must also guarantee consistently high quality, which always constitutes a challenge – especially for large production volumes. That is why we rely only on selected renowned manufacturers. Long-established movement manufacturers with proven experience, with whom we have worked successfully for many years. We value these manufacturers for their flexibility, too, because they produce the movements in parts according to our design specifications or fill them, for example, with SINN special oil. But most importantly, the movements we receive from our manufacturers and build into our watches are of outstanding quality.

SZ movements, Sinn Spezialuhren zu Frankfurt am Main

This is the name given to our movement modifications. These represent the sophisticated engineering achievements that have already been put to use in various SZ movements by our highly skilled master watchmakers. In order to increase clarity and readability, we create new technical designs based on tried-and-tested movements such as the Concepto C99001. From development to series production, everything related to our SZ movements is done exclusively in-house. The service spectrum comprises the concept, design, prototype construction and pre-production samples. Following extensive testing, the SZ movements are put into series production. The result is high-quality calibres characterised by impressive technical features. Detailed information on individual SZ movements can be found at sinn.de/en.

SELLITA WATCH CO SA, La Chaux-de-Fonds, Switzerland

This independent Swiss company was founded in 1950. Sellita specialises in the development, production and assembly of proprietary mechanical movements. As a leading manufacturer with a considerable production volume, Sellita has gained a reputation in the industry for producing movements according to the highest quality standards. Strict production standards and an eye for even the finest of details allow for a certain degree of flexibility and enable us to meet individual customer requirements in exclusive complications or production volumes. Sellita offers a wide range of different high-quality calibres, with new additions expected to follow in the future.

Manufacture La Joux-Perret, La Chaux-de-Fonds, Switzerland

La Joux-Perret is a Swiss Manufacture serving numerous watchmaking Brands with its mechanical movements. Based in La Chaux-de-Fonds, La Joux-Perret houses about forty different professions spread in ten ateliers, all required to produce precision mechanical movements. With its comprehensive portfolio of modules and completes calibres, among them many complications such as chronographs and tourbillons, La Joux-Perret can fulfil all kind of movements requests, from a fully personalized realisation to important productions.

Concepto Watch Factory SA, La Chaux-de-Fonds, Switzerland

Founded in 2006, the manufactory for exclusive products specialises in the development and construction of movements and mechanisms of the highest quality. The entire bandwidth of mechanical watch components is manufactured here using state-of-the-art technology. The comprehensive product portfolio includes everything from a simple three-handed watch movement to the most elaborate complications, alarm functions, chronographs, tourbillons, minute repeaters and super-slim modules and movements. The company produces limited editions and larger quantities exclusively for various brands. Highly skilled personnel and high-performance machinery guarantee outstanding service.

ETA SA Manufacture Horlogère Suisse, Grenchen, Switzerland

The roots of the traditional Swiss company date back to 1793. Drawing on this experience, the Swatch Group company ETA SA develops and produces a wide range of calibres. Its most popular movements include the pocket watch movement Unitas featuring a manual winding mechanism, and the automatic chronograph movement Valjoux. With over 20 locations and annual production reaching into the millions, ETA SA is one of the biggest movement manufacturers in the world. Despite such huge volumes, ETA SA produces movements of consistently high quality. Which is also why experts regard the name ETA SA as being synonymous with the best materials, precision and reliability.

Soprod SA, Les Reussilles, Switzerland

Founded in 1966, this long-established Swiss company has been part of the Festina Group since 2008. The Festina Group specialises in the construction of watches, movements and movement parts. Within the Festina Group, Soprod is responsible for manufacturing high-quality movements and components. Since its foundation, Soprod has made a name for itself with the development of proprietary movements constituting the key production mainstay. In addition, Soprod develops and produces exclusive complications according to individual customer requirements. As an independent company, Soprod guarantees the highest quality for all components used in movements.

Uhren-Werke-Dresden, Germany

Uhren-Werke-Dresden (UWD) was established in early 2013 under the umbrella of the Tempus Arte Group. The company has committed itself to strengthening the competitiveness of German watchmaking. In a state-of-the-art production facility, everything from individual watch components to complete movements and watches are developed and produced. In doing so, UWD creates customised solutions for both German and international customers. The manufacturing of small quantities is just as important as the design and implementation of individual projects. The result is products characterised by their exclusivity. For example, the high-quality hand-wound calibre UWD 33.1 used for the first time in series production in a watch for our 6200 Meisterbund I model

Ar-Dehumidifying Technology

Ar-Trockenhaltetechnik

Ar-Dehumidifying Technology solves a basic problem of mechanical watches: the ageing of oils due to moisture in the air contained inside, or diffusing into, the watch. The movement is mounted in a nearly anhydrous atmosphere thanks to the three Ar-Dehumidifying Technology elements: drying capsule, EDR seals and protective gas filling. Ageing processes and fogging of the crystal from sudden cold are prevented, and reliable functioning and accuracy are ensured.

Why does a waterproof watch need dehumidifying technology anyway?

The beauty and fascination of owning a SINN watch are enhanced by the knowledge of the fine mechanical precision of this object of daily use. Nonetheless, no matter how accurately the individual components are made, friction and wear must be minimised so that they function durably. Thus high-quality synthetic oils are used to ensure optimal lubrication of the movement bearings. This remains an unavoidable process in all mechanical watches. Humidity, however, accelerates the ageing of the oils. How does moisture get into the watch? Water is always present in the atmosphere in gaseous form, which is why it can penetrate the seal systems of a watch case. Temperature changes then cause micro-condensation, permitting water to collect in liquid form on exposed parts of the movement. The consequence: the efficiency of the lubrication deteriorates. Electrochemical corrosion. wear and friction increase, reducing the amplitude



Inspection glass of the drying capsule of the U2 series at 6 o'clock.

of the balance. The watch runs with decreasing accuracy and must finally be reconditioned. Our engineers looked for solutions to this problem and found them in the form of Ar-Dehumidifying Technology.

Mounted in a nearly anhydrous environment

These painstaking and technically elaborate measures are intended to keep the movement in a protective environment which is almost completely dry (anhydrous). A positive consequence of this is that it slows the ageing process of the oil, thereby extending the functional life of the movement. Also, fogging of the crystal due to sudden temperature shocks (such as immersion in cold water) can be prevented, ensuring that the watch remains clearly legible at all times.

Three-year warranty

Ar-Dehumidifying Technology is a truly pioneering achievement for mechanical wristwatches by our engineers – and a decisive advancement for all aficionados of mechanical watches. A three-year warranty is offered on all watches featuring Ar-Dehumidifying Technology.

Indication colours of the drying capsule

Pale blue Up to 25% saturation



Initial condition

light blue

Up to 50% saturation

Medium blue Up to 75% saturation



Dark blue Up to 100% saturation



Drying capsule saturated

The colour scale for the Ar-Dehumidifying Technology: the capsule continues to absorb moisture until the darkest colouration is reached.

Three technical elements

The Ar-Dehumidifying Technology works with three technical elements: drying capsule, EDR seals and protective gas filling. The drying capsules consist of five components which are pieced together in our Frankfurt workshop and then individually tested one by one.

1. The primary element: the drying capsule

The drying capsule is the most important part of the Ar-Dehumidifying Technology. The capsule is filled with copper sulphate; this absorbs moisture from the air inside the case and binds it permanently. Copper sulphate turns increasingly blue as its water content rises; the shade serves as an indicator of the drying capsule's level of saturation (see diagram). The capsule features a small viewing window of sapphire crystal glass for this purpose.

2. EDR seals

To minimise the exchange of gas between atmospheric air and that inside the case, and thus the penetration of atmospheric moisture, we only use Extreme Diffusion-Reducing (EDR) seals in watches featuring Ar-Dehumidifying Technology. These seals reduce the infiltration of moisture in the case to as little as 25% of the value permitted by conventional case seals made of nitrile rubber (NBR).

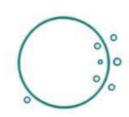
3. Superior protective gas filling

The Ar-Dehumidifying Technology is completed by a superior protective gas filling. This creates an ideal climate for the Ar-Dehumidifying Technology to function in. Only moisture diffusing from the air now has to be bound in the drying capsule. This avoids the humidity which is otherwise locked in during conventional assembly.





The titanium drying capsule. As with crowns and push-pieces, we use EDR seals here, too.



All seals are made of sealing materials that are **e**xtremely **d**iffusion reducing (EDR).

DIAPAL

Lubrication-free anchor escapement

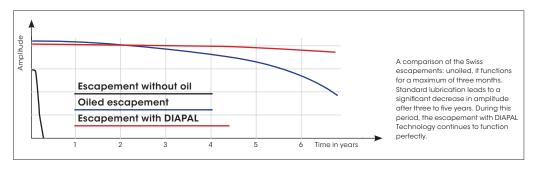
The objective of the Ar-Dehumidifying Technology is to prevent the oil from ageing. The idea behind the DIAPAL Technology goes one step further. In this case, we select special pairs of materials that work together without lubrication (!) and without causing friction, ensuring long-term accuracy of the movement and particularly of the Swiss anchor escapement.

For improved lubrication quality

To counteract the ageing processes of the oil in the watch, the movement is maintained in a dry environment filled with protective gas using our Ar-Dehumidifying Technology. The technicians, engineers and physicists at SINN are currently focusing on an even more efficient solution to this problem. Their idea: if oil isn't used, there won't be any difficulties with ageing oil. The approach based on this idea focuses on the Swiss anchor escapement. The reason for this is the special role this part of the movement plays with regard to the ageing of the oil. Empirically, the anchor escapement is the most sensitive component of the movement with regard to accuracy, i.e. the quality of the lubrication at this point has the largest impact on the accuracy of the entire movement.

In the beginning was the diamond: today we celebrate the triumphs of nanotechnology

SINN began its research on the DIAPAL Technology in 1995 with the idea of using diamond pallets to replace ruby ones. For conventional escapements, oil is required only to reduce friction between the ruby (pallet stone) and the steel (escape wheel). In the Swiss anchor escapement, a polished diamond surface proved to be a better friction partner than the ruby traditionally used for this purpose. Lubrication is no longer required for lasting accuracy and function. However, this combination still failed to produce acceptable oscillation amplitudes without lubrication. Thus, in 1995 SINN began testing numerous other material combinations for use in watch technology, and applied for the first patents in 2000. SINN has retained the name DIAPAL for all developments that follow on from the original diamond pallets, i.e. for all material combinations that prove suitable for helping a train wheel - especially with Swiss anchor escapement – to function smoothly over time without lubrication. Ultimately, the first nanotechnology solution to reach series production was the 756 DIAPAL.



HYDRO

Reflection-free readability underwater

Absolutely free from fogging, pressure-resistant at any accessible diving depth and perfect readability from any angle underwater – these are the unbeatable advantages of our diving watches equipped with HYDRO Technology.

The principle

In a HYDRO watch case, the movement, dial and hands are held in a crystal-clear bath of fluid with the same refractive index as that of the sapphire crystal glass. This means that the light reflected by the dial and hands is not refracted as it enters the sapphire crystal glass. The fluid is also incompressible. It replaces the air inside the case which inevitably contains moisture. This yields a whole range of advantages.

Advantage: completely free from fogging

The absence of any air inside the case keeps our HYDRO watches completely free from fogging. Fogging only occurs in air which contains moisture; this can condense if the temperate falls below the "dew point". Where there is no air humidity – there can be no condensation!

Advantage: pressure-resistant at all possible diving depths

Fluids are virtually incompressible. The membrane back allows the internal pressure of the watch to adjust constantly to the external pressure. Thus the HYDRO watch is pressure-resistant at any accessible diving depth.

The pressure load which otherwise builds between the internal assembly pressure of a watch (1 bar) and the external water pressure (which increases by 1 bar per 10 m depth of water) does not arise in a HYDRO watch.



Advantage: reflection-free underwater

The crystal of a conventional diver's watch will unavoidably reflect light underwater - but not a HYDRO watch. A HYDRO watch can be read from oblique angles underwater, just as it can when out of water. The reason for the characteristic mirroring effect is the total reflection on the bottom of the crystal. If the optical medium of "sapphire crystal" is succeeded by the medium of "air" (looking towards the dial), the light will only be reflected and no longer refracted from a certain angle. This prevents the light from penetrating the interface between the sapphire crystal and the air-filled space containing the hands. From this angle, the effect is similar to that of looking at a mirror. The hands are no longer visible. Replacing the air in the cavity containing the hands with a fluid which shares the same optical characteristics as the sapphire crystal glass neutralises this effect, making the watch face fully readable even at highly oblique angles.

Picture left:

The latest generation of our HVDRO watches, UX series (EZM 2B), compared to other brands of diving watches. Thanks to HYDRO Technology, the only brand to offer reflection-free readability underwater.

Because they require oil, HYDRO watches must be quartz watches, as the oscillation of the balance in a mechanical watch would be unable to overcome the friction resistance of a liquid. Our HYDRO watches are all fitted with a highly precise temperature-stabilised quartz movement and powerful, long-lasting lithium batteries.

Magnetic Field Protection

() Magnetfeldschutz

Magnetic fields such as those of electric motors, loudspeakers or door closers cause the Nivarox balance spring to become magnetised and adversely affect the accuracy of the watch. We solve this problem by using a protective sheath consisting of a closed, magnetically soft inner case that includes the dial, the movement holding ring and the case back. This Magnetic Field Protection minimises magnetic interference.

Interference of the accuracy of the watch due to magnetic fields

As early as the 1930s, watches used for special purposes were protected against magnetic fields. The electric motors of locomotives considerably interfered with the accuracy of mechanical watches. An iron shield was therefore used to protect special "railway models" from magnetic field interference. Later, Magnetic Field Protection was integrated in pilot watches due to the magnetic deflectors used in the radar screens found in airplane cockpits and ground stations. However, the restriction of Magnetic Field Protection to professionally used chronometers is proving absolute in today's world.

While the earth's magnetic field is far too weak to pose any risk, magnetic fields from electric motors, loudspeakers, door closers or other such sources can cause lasting interference with the function of a mechanical watch.

The main source of defect

Nivarox balance springs are made of a temperature-compensating material which, in certain unfavourable circumstances, becomes magnetised. Irregularities in the rate of the movement are therefore the result of a magnetised balance spring, i.e. a defect in the watch's clock-pulse generator. When it comes to magnetic field sensitivity, the modern balance spring is far superior to the older steel springs with regard to sensitivity to magnetic fields, because Nivarox springs are non-magnetic as required by DIN 8309. However, in the case of a relatively low magnetic field exposure of 6 mT or 4,800 A/m – roughly one quarter of the

pole strength of a common household magnet – this permits an accuracy error of ±30 seconds per day. Compliance with chronometer standards is thus impossible. If the spring is exposed to stronger magnetic fields, the oscillation of the balance will change permanently.

SINN-study about magnetised watches

In a study of 1,000 watches by SINN's customer service department, nearly 60% of the watches received were magnetised, and half of these had severe defects caused by magnetic fields. During this study, the speed of the movement before and after demagnetisation was documented. If the speed deviation before demagnetisation was greater than 5% of the speed after demagnetisation, a defect due to magnetic fields was assumed. Magnetic field influences were also found even when the wearers weren't aware of any contact with sources of magnetic fields. As a consequence, all watches received by our customer service workshop are first demagnetised using an electromagnet.

Conversion table					
Unit	SINN watches with (
mT (millitesla)	100				
A/m (ampere per metre)	80,000				
Gauss	1,000				
Conversion table showing the common measurement units for magnetic fields.					

Magnetic Field Protection

Magnetic fields can be diverted using magnetisable materials. Place a hollow body of iron in a magnetic field and you will see that a large part of the magnetic flux lines are bundled in the wall of the hollow body. The interior is thus shielded to a large extent from magnetic forces. SINN engineers use this principle to their advantage to create Magnetic Field Protection. Following exposure to a magnetic field, it is important that the protective sheath does not remain magnetised and thus become a source of interference. Materials that can be easily magnetised yet have little remanence (residual magnetisation after exposure to a magnetic field) are referred to as "magnetically soff". Pure iron is a very good example of this. With the aid of magnetically soff materials, Magnetic Field Protection up to 100 mT or 80,000 A/m is achieved for our watches in the event of typical everyday unipolar contact. In order to produce this Magnetic Field Protection, we use a closed, magnetically soff case interior that includes the dial, the movement holding ring and the case back. The SINN trademark \P identifies watches featuring Magnetic Field Protection. It portrays stylised magnetic field lines and a magnetic core.

[] Shielding of electromagnetic pulses

[Q] Abschirmung elektromagnetischer Impulse

Electromagnetic radiation

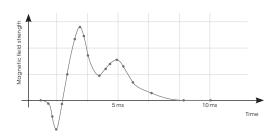
In analogue quartz movements, the gear train is driven by a so-called stepper motor. Rather than turning continuously, this little electronic motor only rotates every second by a certain angle. Like all components with a flowing variable electric current, the stepper motor of a quartz watch also generates electromagnetic radiation while running. In the case of a stepper motor, this takes the form of an electromagnetic pulse.

Shielding measures

The models of the 434 series featuring the symbol on the dial, the electromagnetic radiation (pulse) emitted by the movement is minimised. The quartz movement has a special alloy sheath which is designed to absorb the exact frequency of the movement radiation. This helps prevent for example a compass needle from jerking or an electronic timing machine for quartz watches picking up a stepper signal. The radiation emitted by the movement is 'trapped' in the case, preventing it from escaping.

Effects on humans

The effects of electromagnetism on humans is the subject of various analyses of the impact of electromagnetic radiation on the environment. Here, the focus is on the effect of electronic devices – particularly on public health. Unlike many household devices, quartz watches emit weak electromagnetic radiation. Since some people are highly sensitive to such radiation and a watch is worn directly on the body for an extended period of time, we offer shielding.



Every jump second of a quartz watch radiates an electromagnetic pulse. A control current starts flowing through the motor coil, causing the motor to rotate and generate an induced current. The graph shows exclusively magnetic components for a typical stepper "cardiagram".

Temperature Resistance Technology

Temperaturresistenztechnologie

The long-term accuracy of a watch movement crucially depends on the lubrication of its moving parts – this is particularly true at extreme temperatures. We use the special oil developed by SINN to ensure reliable functioning under even the most extreme conditions. With its outstanding properties, it provides lubrication that is highly resistant to ageing at temperatures between –45°C and +80°C.

-45 °C up to +80 °C

SINN-Special Oil

The higher the temperature, the lower the viscosity of the lubricating oil film. At low temperatures, the oil becomes more viscous, leading to increased friction throughout the movement; more energy is lost in the train wheel, the escapement and the complete balance. Consequently, the amplitude of the oscillation decreases and the watch becomes increasingly inaccurate. In conjunction with the ageing of the oil, which likewise increases the viscosity of the oil, conventional watch oils can thicken enough that the watch stops at temperatures just below the freezing point. Such watches no longer function reliably when used at lower temperatures! Only the special oil with substantially lower viscosity developed by SINN for use in extreme temperatures provides reliable long-term lubrication at very low temperatures. The composition of the oil ensures that it is still sufficiently fluid at temperatures of -45°C and below to maintain the movement's proper mechanical function. Moreover, the viscosity of the oil at +80°C does not change enough to cause the oil to run off the ruby pallets of the escapement. Our SINN special oil is a universal oil that can be used in everything from the balance bearings and the train wheel to the escapement pallets and ensures highly gaeing-resistant lubrication in extreme conditions thanks to its outstanding temperature properties.

Expansion and contraction rates

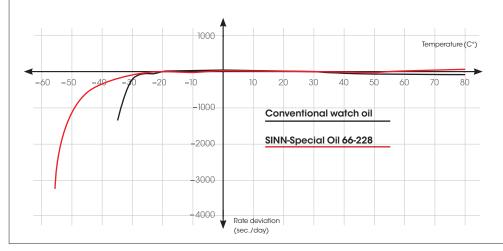
Lubrication with SINN oil is essential for a SINN watch capable of withstanding extreme temperatures from -45°C up to +80°C. But oil alone isn't enough. Just as important are the expansion and contraction rates of the movement's individual components. Here's why: various materials are used in the movement of a watch and these materials respond differently to temperature expansion. This means that when the entire movement is exposed to higher temperatures. the components change in size to different extents. Some parts expand faster, others more slowly. In some cases, this can negatively influence the movement's function, as the individual components suddenly no longer fit together precisely. We counteract this negative effect by testing each individual watch in a temperature chamber. Each and every watch must meet our strict quality standards even at extreme temperatures.



Each and every watch is tested in a temperature chamber at -45°C to +80°C.

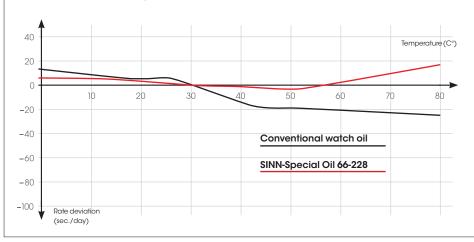
Accurate between temperatures from -60°C to +80°C.

When worn on the wrist, watches have an average operating temperature of 30° C. However, when worn above the clothing, they quickly assume the ambient temperature. Watches are significantly less accurate at temperatures below freezing. And below -30° C the accuracy is difficult to define. Watches which are lubricated with conventional watch oil generally come to a stop. Watches lubricated with SINN-Oil, by contrast, continue to run even at temperatures well below -45° C. The rate variation here, however, is relatively high; the watch loses time at a rapid rate. We guarantee the reliable functioning of enabled chronographs in a temperature range from -30° C to 80° C.



Accuracy within temperature range of 0°C to +80°C.

The second diagram is to a different scale and shows how accurate the watch remains in temperatures above 0°C using SINN-Special Oil 66-228.



TEGIMENT

Greatly increased scratch-resistance thanks to surface hardening

TEGIMENT Technology raises the hardness level of the base material, e.g. stainless steel, by a significant factor. The technology was first introduced in the 756 Duochronograph at the International Baselworld Watch and Jewellery Show in Basle in 2003, replacing the ice-hardening technique for nickel-free watch cases first presented in 2002. Originally TEGIMENT Technology was only used on stainless steel cases. The term is now used to refer to all materials with a hardened surface.

TEGIMENT Technology provides highly effective protection against scratches. The method is not, however, based on the application of a coating. Instead it is the surface of the material itself which is hardened by means of a special process, thereby creating a protective layer ("tegimentum" in Latin). The surface of any watch hardened using TEGIMENT Technology has a significantly greater level of protection against scratches than that afforded by the hardness of the base material.



The **U50 DS** with TEGIMENT Technology.

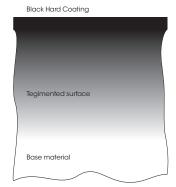
Black Hard Coating

Schwarze Hartstoffbeschichtung

We only use hard coating (PVD coatings) with TEGIMENT surfaces. Because only in this combination is it possible for our PVD paint coats to achieve their required high quality.

The hardness profile of the TEGIMENT layer is continuous, i.e. the increased hardness of the surface transitions very gradually to the basic hardness of the material itself. This makes it possible to apply a PVD coating without any risk of the otherwise familiar peeling effect from the body of the case.

Paint coatings applied using the PVD technique are exceptionally hard. They have a hardness level of up to 2,000 Vickers. The great and sudden difference in hardness between the hard coating and the base material results in disruption between the two when subjected to stress because the hard shell (PVD coating) is applied with no transition to a very soft core (case material). If a local force is applied, the base material yields and cannot provide sufficient support for the outer layer. This is called the "egg shell effect".



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

The hardness of the TEGIMENT surface, by contrast, supports the hard coating layer. This prevents the egg shell effect and dramatically reduces flaking of the paint coating. Although the paint coating applied using the PVD technique is extraordinarily hard, it may become damaged on contact with harder materials. This corresponds to the latest technological standards and is therefore unavoidable. The problem is that, unlike a solid-coloured material, a paint coating always remains vulnerable under certain conditions.

Captive Safety Bezel

Unverlierbarer Sicherheitsdrehring

The construction of the rotating bezel is extremely important in terms of safety. To prevent any risks to the life and health of the diver, the solution we use in our T50 is based on two elements.

One is the captive design of the rotating bezel. Our secure attachment differs hugely from that of conventional snap-in mechanisms. Our special design prevents the rotating bezel from becoming detached as a result of catching or being accidentally knocked, causing the set time to be lost. Series T50 incorporate a second element. In addition to the secure attachment, they are also protected against accidental rotation – a feature which goes beyond the specifications laid down in DIN 8306. This standard stipulates that it should only be possible to adjust the set time of a diving watch by turning the bezel anticlockwise on one side. A patented mechanism prevents the safety bezel of the T50 from being unintentionally rotated. This makes it impossible for the set time to be accidentally knocked and changed.



How to adjust the set time using the Captive Safety Bezel

 To adjust the set time, first unlock the bezel. Press it down on opposite sides using two fingers. It is not possible to unlock the bezel using just one finger.

 Hold down the bezel and turn it anticlockwise to the desired set time. Once you release the bezel, the rotation protection is reapplied and the bezel is once again prevented from being accidentally adjusted.

DIN 8330 is the standard for pilot watches

TESTAF forms the basis for the standard in pilot watches



German DIN standards command a high level of respect both nationally and internationally, and represent the highest level of quality. The standard DIN 8330 for timekeeping technology in pilot watches, which came into force in March 2016, sets a new benchmark for safe, functional and reliable pilot watches. Watches certified in accordance with DIN 8330 are designed to fully assume the functions of the instruments for time measurement in aircraft and helicopters in the event of outages or suspected failures. This means that pilot watches must meet certain requirements in terms of functionality and reliability, resistance to external stresses, safety and compatibility.

As a long-established manufacturer of pilot watches, Sinn Spezialuhren took the initiative and promoted the development of a recognised DIN standard – the first new German watch standard in decades. It all started with the TESTAF technical standard for pilot watches developed by Sinn Spezialuhren in collaboration with the Department of Aerospace Technology at Aachen University of Applied Sciences. Building on this standard, and with the participation of the German watchmaking industry, the DIN 8330 standard for pilot watches was developed over a period of several years by users, testing institutes and scientists.

DIN 8330 defines what a pilot watch must be able to do and which stresses it must be able to withstand. This includes fast, clear readability of the dial both during the day and at night, the ability to operate the watch even while wearing pilot gloves and accuracy not only at room temperature but also at ranges of between -15° C and $+55^{\circ}$ C.

The DIN tests to determine physical resilience include not only a simple low-pressure test, but also a several-thousandfold pressure change cycle which simulates the stresses on the watch caused by changes in pressure during take-off and landing of an aircraft in daily long-haul operation. Resistance to liquids typically found in aircraft (fuel, lubricants, cleaning fluid and de-icing fluid) not only guarantees safety during flight operations but also provides additional protection on the ground. A DIN-certified pilot watch must also be able to withstand clearly defined vibrations, impact and centrifugal force loads, temperature changes and, not least, magnetic fields.

The safety features of a DIN-compliant pilot watch include a particularly secure strap fastening and the required compatibility with night vision equipment. Light reflections that could distract or dazzle the pilot are minimised, and the possibility of any interference with the plane's avionics and emergency compass is eliminated as far as possible through tests. All this means that watches certified in accordance with DIN 8330 ensure better safety in the air and increased suitability for everyday use, going far beyond the shock-resistant and waterproof characteristics of standard watches. The aim of DIN 8330 is for such watches to be recognised by regulatory authorities, manufacturers and aircraft operators as a replacement for malfunctioning on-board instruments.

The DIN 8330 standard takes the uncompromisingly high demands placed on aircraft and helicopter equipment and applies these to wristwatches. Building on TESTAF, the DIN standard widens the pool of certifiable watches (mechanical watches are now eligible as well as quartz watches) and features more stringent test criteria.

Thanks to the DIN 8330 standard, we hope that pilot watches will once again be defined as watches offering special functional and technical features. The special quality standards that apply to a DIN 8330-certified pilot watch can be seen at every stage of its manufacture, from the selection of high-quality materials to production processes where special care is always taken and ultra-narrow tolerances apply. The goal is achieved in an extensive, complex type-and-unit verification procedure and a certification process carried out by a neutral institution in accordance with DIN/ISO 17065 and 17067.

Only then can the watch be furnished with the well-known DIN certification mark.

With its support for the TESTAF and DIN 8330 initiatives, Sinn Spezialuhren underlined its aspiration to create functional, high-quality and high-tech watches. For the technologically sophisticated German watchmaking industry, the new standard for pilot watches provides major impetus to maintain and expand its leading role in this segment among the international competition.



The magnetic signature of a pilot watch certified according to DIN 8330 must not significantly divert the approved magnetic compasses in the aircraft through its physical proximity. The magnetic signature of a pilot watch is identified using a special test stand. A magnetic signature characteristically changes and/or influences existing magnetic fields. Using such a watch in the cockpit of an aircraft means that this characteristic could deflect the aircraft's emergency compass. To prevent this, the test watch, in this case our 1031 IIFs, if srist demagnetised and then exposed to a homogeneous magnetic field of defined field strength. In the second stage of the test, the magnetic signature of the test watch is analysed using the test stand apparatus pictured. Additional protection may be provided by using non-magnetic materials such as titanium for the case. A timepiece which meets these design requirements will not then become a source of magnetic field interference, yet will still meet the DIN 8309 requirements for anti-magnetic watches

Magnetic Field Protection in pilot watches designed for professional use

The uncompromising development of mission timers designed for professional use should always take specific environmental factors into account and closely monitor any gradual changes in the field. For example, the fact that aircraft have not been fitted with conventional radar screens for many years now or that sources of magnetic fields which could interfere with the working of a mechanical watch are no longer built into modern cockpits.

The Magnetic Field Protection incorporated in some of our models now offers greater protection from the influence of external magnetic fields on the rate of the movement. However, the specially designed protective cage used for this emits its own magnetic signature. Using such a watch in the cockpit of an aircraft means that this characteristic could deflect the aircraft's emergency compass. In compliance with TESTAF, the solution should therefore be to dispense with using a magnetically soft internal cage and instead rely on non-magnetic materials such as titanium. A timepiece which meets these design requirements will not then become a source of magnetic field interference, yet will still meet the DIN 8309 requirements for anti-magnetic watches. DIN 8330, which is based on the TESTAF technical standard for pilot watches, also strictly limits and tests the maximum permissible magnetic signature of pilot watches.

DNV certifies SINN Diving Watches



So what does DNV (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!

The background: 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.

Testing for water resistance and pressure resistance

Since 2005, DNV has been testing our diving watches for water resistance and pressure resistance. In accordance with these certification standards, the 206 ARKTIS II and 206 St Ar are pressure-resistant to 30 bar, the U50, T50, the EZM 3, EZM 13 and EZM 13.1 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 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.

Premiere: certification for compliance with European diving equipment 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 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), 206 (since 2019), U50 (since 2020), EZM 13.1 (since 2022), T50 (since 2023) 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.



Two U1 models as well as a case are lowered into the pressure chamber.





Successful certification by DNV (formerly Germanischer Lloyd) of pressure resistance (top) and compliance with the European diving equipment standards ENZ50 and EN14143 for the U1 and U50. The two certificates shown here are representative of the certified series 206,71,72,750, U2, U200, U212, UX, UX, GSG9, U1000, EZM 3, EZM 13.1 and EZM 13.

About DNV (formerly Germanischer Lloyd)

DNV provides technical testing and certification as well as software and independent advisory services to the energy, oil and gas, and maritime industries. DNV is represented at 300 locations in more than 100 countries. Every day, over 16,000 employees around the world help customers to make the world safer, smarter and greener.

DNV 150 years ago

DNV was the result of a merger between the classification companies Det Norske Veritas (DNV) and Germanischer Lloyd (GL), both of which started out in shipping almost 150 years ago. In the early days of maritime trade, whoever entrusted a ship to transport their goods or even sailed on board themselves as a crew member or passenger wanted to know that the ship would be safe on its travels. Shipowners and merchants would not rely solely on the good reputation of the shipbuilder or captain. Objective criteria had to be created in order to check safety standards. Even back then, the technical quality of a ship was decisive in ensuring the safe transportation of cargo and passengers on the high seas. On the initiative of various shipowners, an advisory committee was formed to deal with ship classification. While 1864 saw the foundation of the classification company DNV, three years later the articles of incorporation were signed in the great hall of the Hamburg stock exchange to establish GL.

DNV today

Almost 150 years later, in September 2013, the merged company DNV commenced operations. The DNV merger created not only the world's biggest ship classification company, but also one of the leading providers of testing and inspection services for the oil and gas industry as well as an expert in renewable energies and smart grids. DNV is also one of the world's top-three certification bodies for management systems.

Since 1997: EZM - Mission timer for professionals

An accurate timekeeping tool

Since the company's foundation in 1961, we have focused on making timepieces designed to ensure maximum functionality and precision. Careful consideration goes into each stage of development because every single watch is conceived and designed with a consistent focus on functionality. Our mission timers (EZM) have now been embodying the principle of 'form follows function' to perfection for more then 25 years.

It is therefore only logical that these striking timepieces represent a large part of our product portfolio.

On the other hand, the high quality of our mission timers distinctly defines our profile – making them highly regarded by professionals (for whom they are also intended): including pilots, divers, firefighters, emergency doctors, rescue workers, special units of the German police department and armed forces such as the GSG 9, Germany's commando frogman force, KSM (Kommando Spezialkräfte der Marine), and the special unit of the German Central Customs Support Group, ZUZ (Zentrale Unterstützungsgruppe Zoll).

Readability and time measurement

We designed the first EZM for a special task force in 1997. The basic design characteristics of this EZM 1 – namely, reducing the display to an absolute minimum to ensure optimum readability and perfect time measurement – ultimately shaped the development of all subsequent mission timers. The now legendary EZM 1 paved the way for a series which has proved exceptionally successful to date.

Form follows function

The design of the mission timers is thus based on the so-called EZM principle of optimum readability. The timepieces are strictly designed for their specific purpose and function as precision tools. This makes them reliable and indispensable for those using them. Key to ensuring such functionality when developing these timepieces is our cooperation with experts – i.e. those actually using and relying on the high performance of the timepieces out in the field. Quite often these experts are faced with critical situations.



The soldiers in Germany's commando frogman force, KSM (Kommando Spezialkräfte der Marine), wear the 'UX S Combat Swimmer (EZM 2B)' version of the 2B (UX S) mission timer, which is not available for retail.

where minutes and seconds become a matter of life and death. It is these users and even more so the respective conditions in which they operate that define and determine form and functionality. The mission timers must be able to withstand the most varying external conditions, including wetness, magnetism, extreme heat and cold, major changes in temperature, vibrations, impact and knocks as well as aggressive liquids such as salt water or disinfectant. And often, all at once. They must therefore have a high level of tolerance

Experts in technology and cases

How? Over the years, we have gradually become experts in technology and cases, manufacturing and fitting our timepieces with the best possible materials and components. To ensure we stay at the cutting edge, we constantly keep an eye on the latest industrial and scientific developments in technologies and materials. The outstanding quality of our mission timers is largely due to our ability to think outside the box, our unbelievable attention to detail and our inability to ever be satisfied with the norm.

EZM 12 - designed for emergency doctors

Since the first mission timer, a whole range of different watches from this segment have been added. Since each mission timer is equipped with the relevant functions for the operation's specific requirements, no two are the same. Yet they are united by one common principle of construction and design: focus on the key essentials in terms of outstanding readability and rapid time recording. The EZM 12 is a particularly good example of this concept. Designed as a tool for emergency service doctors, the EZM 12 enables optimum readability and measurement of critical times. The reasoning behind this is that critical decisions are made and life-savina measures performed upon arriving at the scene of an accident. Emergency doctors often refer to the 'platinum ten' (a critical patient should be stabilised, treated and transported within the first ten minutes) and the 'golden hour' (a patient should arrive at the hospital within the hour of an accident). To keep tabs on these crucial windows, the EZM 12 is equipped with a countup inner rotating bezel. This allows emergency workers to monitor such time frames reliably, which is extremely important when call-outs can be chaotic and stressful with unclear dangers and adverse weather conditions. A second countdown rotating bezel offers the option of measuring additional time intervals which are relevant when rescuing and assisting critically injured people. These could include the administration of medication or a helicopter take-off which has to happen within a certain period of time because bad weather is approaching. Reminiscent of the air rescue service, the seconds hand of the EZM 12 is designed in the shape of a helicopter rotor and features a pulse scale. This enables easy recording of the heart rate every 15 seconds.



As time is always of the essence in an emergency, the EZM 12 allows emergency doctors to keep an eye on critical times.



EZM 1 and EZM 1.1

EZM 1:1997-2005, designed for the Central Customs Support Group ZUZ (Zentrale Unterstützungsgruppe Zoll).

EZM 1.1: limited special edition in 2017

The display design has been reduced to an absolute minimum for optimum readability and perfect time measurement. A special feature is the centre-mounted, 60-minute stopwatch hand.



EZM 1.1 S

Limited special edition in 2022 Designed to mark 25 years of mission timers.

The display design has been reduced to an absolute minimum for optimum readability and perfect time measurement. A special feature of the watch is the SINN chronograph movement SZ01 with 60-minute stop function from the dial centre.



EZM 2 and EZM 2B

Pages 84-85

Since 1997 (EZM 2B), 1997-2005 (EZM 2)

Designed as a diving watch for the maritime unit of the Border Protection Group 9 (GSG 9).

Thanks to the use of HYDRO Technology, this mission timer is reflection-free and offers perfect underwater readability from any angle, absolute freedom from fogging and is pressure-resistant for any accessible diving depth.



EZM 3

Page 57 Since 2001

Developed for professional use by divers.

All functions and printed elements on the dial which are not directly relevant for diving are visually moderated in red.



EZM 3F

Page 57 Since 2015

Designed as a pilot watch with Magnetic Field Protection.

Featuring a countdown pilot's bezel with minute ratcheting, which can be rotated on both sides. Waterproof and pressure-resistant to 20 bar.



EZM 4

2001 to 2005

Developed for use by fire brigades and rescue services.

The display features a pulsometer scale and a measurement scale for monitoring time limits during operations involving breathing apparatus.



EZM 5

Pages 78-79 Since 2005

Developed for professional use by divers.

The display of the 24-hour second time zone is visually moderated in red as this function is not directly relevant during dives.



EZM 6

2008 to 2018

Designed as a diving watch for professional use.

The SZ02 used here is characterised by an off-centre 60-minute counter. Flat, non-screw-fastened, large-format push-pieces ensure that chronograph functions can be triggered accurately even when the user is wearing diving gloves.



EZM 7 2010 to 2022

Developed for use by fire brigades and rescue services on the basis of German fire service regulations FwDV 7 and FwDV 500. Specially designed for task force commanders and those responsible for monitoring and checking breathing protection equipment.

The colour-coded bezel allows users to set and read off the key mission times for breathing equipment users.



EZM8

2010 to 2018

Developed for professional use by divers.

All functions and printed elements on the dial which are not directly relevant for diving are visually moderated in red.



EZM 9 2013 to 2020

Developed for professional use by pilots.

Tested and certified to the technical standard for pilot watches (TESTAF).

Fitted with a case made of high-strength titanium and a captive pilot's bezel.



EZM 10

2011 to 2019

Developed for professional use by pilots.

The stop function is equipped with a centre-mounted jump 60-minute stop hand. The coating of orange-coloured daylight luminous paint means that the stop function stands out clearly under UV light in darkened cockpits.



EZM 12Pages 58-63
Since 2017

Designed for the air rescue service.

The count-up inner rotating bezel enables quick and easy reading of the "platinum ten minutes" and "golden hour". Easy to clean and sterilise thanks to removable strap and rotating bezel.



EZM 13 und EZM 13.1

Pages 56-57 2014-2021 (EZM 13), since 2022 (EZM 13.1)

Designed as a diving watch for professional use.

Stop function with an off-centre 60-minute stop hand. Fitted with a captive diver's bezel with minute ratcheting.



EZM 14 and EZM 15

2013-2021 (EZM 14), 2013-2020 (EZM 15)

Designed as a diving watch for professional use.

Fitted with a captive diver's bezel with sophisticated guard to prevent accidental misadjustment. The EZM 14 is pressure-resistant to 100 bar (= 1,000 m water depth). The EZM 15 is pressure-resistant to 200 bar (= 2,000 m water depth).



EZM 16

Pages 82-83 Since 2015

Designed as a diving watch for professional use.

All functions and markings on the dial not relevant to diving are muted in red.

How a NaBo 17 ZM survived a Tornado crash

Historic cockpit clock provides design inspiration for 717 model

16 April 1980 was a Wednesday that will forever be remembered in the history of German military aviation. It was on this historic day that a Panavia PA-200 (P04 prototype) combat aircraft – better known as a 'Tornado' – crashed on German soil for the first time. Both test pilots working for the company Messerschmitt-Bölkow-Blom died in this tragic accident in Geiselhöring in the district of Straubing.

Sinn NaBo 17 ZM in the Tornado

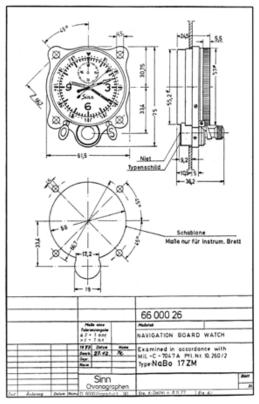
At the time, the Tornado - a twin-seat multirole combat aircraft - was being used by the German, British, Italian and Saudi Arabian armed forces as a fighter-bomber, interceptor and reconnaissance aircraft. Following the first flight on 14 August 1974 at Manching, series production of 992 planes ran between 1979 and 1998. The German armed forces still haven't announced the final date for withdrawina this reliable multirole combat aircraft, with 85 of them still in service as it stands. What's really interesting is that these twinengine jets with swing wings were equipped with two NaBo 17 ZM navigation cockpit clocks - one for the pilot and the other for the weapon systems officer. And these timepieces were supplied by Frankfurtbased watchmaker Sinn. This type of cockpit clock is still used by the military today in Tornado aircraft. The NaBo 17 model made by Sinn was also used in the F-104 Starfighter, the Breguet Atlantic - a long-range maritime patrol aircraft - and military helicopters such as the Bölkow Bo 105



A Helmut Sinn advert from the 1970s with an image of the NaBo 17 ZM in the centre. As the advert shows, the watchmaker had already equipped a whole range of civil and military aircraft with chronographs by that point.



The Tornado featured two NaBo 17 ZM cockpit clocks made by Sinn - one for the pilot and one for the weapon systems officer.



Technical drawing of the NaBo 17 ZM from 1977.



This NaBo 17 ZM survived a Tornado crash on 16 April 1980 unscathed.

Cockpit clock with central minute counter

The German Federal Office for Defence Technology and Procurement (BWB) chose the Sinn NaBo 17 ZM for purely practical reasons. Frankfurt-based Sinn was the only manufacturer to add a central minute counter (the ZM in the model name) to its cockpit clocks. This extra feature made life easier for both the pilot and the weapon systems officer, who could quickly and easily read off stop times during a flight. Plus, the clock was designed to meet the practical requirements of the job to perfection in terms of its functionality, design and readability. Additional special features of these clocks included the start and reset buttons at the bottom of the case, as well as the orange hands of the chronograph's central stopwatch display for seconds and minutes.

Investigation by lieutenant colonel Volkart Rothweiler

It's at this point in the story that retired lieutenant colonel Volkart Rothweiler comes onto the scene. During the 1960s and 1970s, the soldier was a pilot of the Lockheed F-104 Starfiahter multirole combat aircraft. With an unbelievable 269 crashes in total in this aircraft leaving 116 pilots dead, the German armed forces had no choice but to turn their attention to flight safety. Due to his in-depth training, exceptional flying skills and extensive experience, especially with the Starfighter, lieutenant colonel Volkart Rothweiler was sent off on the relevant training (in the USA and elsewhere). Following on from this work, he was appointed as the chair of the trinational committee tasked with investigating the Tornado crash of 16 April 1980 by the Flight Safety General in 1980. And his meticulous investigation revealed something quite astonishing...The pilot's NaBo 17 ZM had survived the horrific crash largely unscathed and was still working perfectly.

Respect and appreciation for the historic NaBo

Much later, at the age of 84, retired lieutenant colonel Volkart Rothweiler came across this indestructible NaBo 17 ZM when he was looking back through the things he had saved over the years. What should he do with such a historic clock? Nobody in his family showed any interest in flying. And yet retired lieutenant colonel Volkart Rothweiler wanted to show his own respect and appreciation for this special timepiece by making sure it ended up in the right hands. Having thought about it long and hard, Sinn Spezialuhren seemed the obvious choice. He wrote to Lothar Schmidt, owner of Sinn Spezialuhren, and told him the unbelievable story in a letter. And that's how the unscathed NaBo 17 ZM made its way to Frankfurt am Main along with some of the retired lieutenant colonel's other belongings, including his uniform, model airplanes and a navigation book for the unit's route from Memminaen/Allaäu to Decimomannu/ Sardinia (with a 90-minute flight time).



The old uniform of the pilot who was later commissioned by the German Air Force and aviation industry to investigate flight safety, retired lieutenant colonel Volkart Rothweiler. He was the one who told Lothar Schmidt the incredible story of the NaBo 17 ZM. And that was how Sinn Spezialuhren ended up with the clock and other items that had once belonged to the retired lieutenant colonel.

From TESTAF to DIN 8330: pilot watch expertise

Anyone who's familiar with the story behind Sinn Spezialuhren will already be aware that our company was known for its wristwatches for pilots and cockpit clocks for civil and military aviation back in the 1960s. Our extensive expertise in pilot watches is what connects our present to our past. After all, it was always our goal to define the term 'pilot watch' and the associated functional requirements more clearly while developing pilot chronographs in the traditional sense.

We managed this for the first time in 2012, when we revealed the first watches with certification in line with the technical standard for pilot watches (TESTAF) initiated by us and developed by the Department of Aerospace Technology at Aachen University of Applied Sciences. The real breakthrough didn't come until 2016, though. For the first time in decades, the German Institute for Standardisation (DIN) published a new German timepiece standard based on the TESTAF standard: DIN 8330 'Timekeeping technology – pilot watches'. The main reason for developing DIN 8330 was to define a DIN pilot watch that can fully replace the prescribed instruments for time measurement in an aircraft in case of emergency. For additional context, a cockpit clock malfunction can restrict in-flight operations and even cause significant financial losses. With this in mind, DIN 8330 – similar to DIN 8306 for diver's watches – sets out the requirements and testing criteria for functionally demanding, safe and reliable pilot watches. Building on TESTAF, DIN 8330 also widens the pool of certifiable watches and features more stringent test criteria for readability, vibration stresses and resistance to liquids commonly found in aircraft.



The design and style of the NaBo 17 ZM provided the inspiration for the 717 model.

Inspiration for 717 model

The NaBo 17 ZM played an important role in the early days of Sinn Spezialuhren and it also provided the design inspiration for the 717 model. This cockpit wristwatch is the perfect proof that the Sinn Spezialuhren brand has always stayed true to its roots. The 717 model also features a central stopwatch display for seconds and minutes in the form of large orange hands, which is created using the time-honoured SINN chronograph movement SZ01. The case houses an interior pilot's bezel, which can be smoothly operated from the outer diameter of the watch. In keeping with its predecessor, the dial is distinguished by its excellent readability, even in the dark, and, thanks to the sapphire crystal glass with anti-reflective coating on both sides, under adverse lighting conditions too.



The cockpit wristwatch won the 'iF Design Award' and the 'German Design Award' in 2022.

iF Design Award and German Design Award

The 717 model was awarded two prestigious prizes in 2022. This is the first ever Sinn watch to have been recognised with the acclaimed iF Design Award. The iF Design Award has been one of the world's most celebrated names in terms of outstanding design since 1954. It is presented by the world's oldest independent design institution, iF International Forum Design GmbH. The 717 was named a winner in the 'Excellent Product Design' category at the German Design Award. The judging panel explained their choice: "The 717 cockpit wristwatch combines the functions of the historical NaBo 17 ZM navigation cockpit clock with the wearer comfort of a sporty wristwatch. With its deep black case and matching sports strap, the 717 model has a timelessly elegant and extraordinarily high-quality design."

"This fascinating and exclusive timepiece ever so stylishly links the past with the future and perfectly embodies our Sinn Spezialuhren brand's DNA down to the last detail."

Warranty statement for watches

In addition to the statutory warranty we, Sinn Spezialuhren GmbH, Wilhelm-Fay-Straße 21, 65936 Frankfurt am Main, also provide a manufacturer's warranty on material and manufacturing defects.

The warranty period is two years, or three years, or five years, as stated on the product page.

The warranty period is calculated from the invoice date.

Our warranty is applicable worldwide.

If you wish to make a warranty claim, we will repair the watch for you at no additional cost.

Warranty claims are excluded in the event of damage caused by:

- Improper use
- Repairs or attempted repairs which were not carried out by us or our authorised partners. A list of authorised partners can be found in the Sales and Service Partners menu on our website www.sinn.de.
- Signs of wear and tear, especially to straps
- -The use of force (blows, knocks, impact)

Loss of your waterproof watch's water resistance is also excluded 24 months from the date of purchase.

Please inform us - Sinn Spezialuhren GmbH by phone +49 (0) 69/97 84 14-400 or email kundendienst@sinn.de - as soon as you are aware of the potential warranty claim to avoid further damage. In order to approve the warranty, we will need the watch and proof of purchase (invoice) with a detailed description of the damage.

In the event of a warranty claim, we bear the costs of sending and returning the watch as well as the transport risk, provided that the transport is carried out by the transport company specified by us and the watch has been securely packaged. Please contact us by phone +49 (0) 69/97 84 14-400 or email kundendienst@sinn.de. Otherwise, as the customer, you will bear the costs of the shipment and the transport risk.

Any costs incurred for customs duties, import duties and other fees incurred when the watch is returned to the recipient country must be borne by the recipient.

We provide this warranty in addition to your existing statutory rights for defects. These rights are not restricted by the warranty and they can be exercised free of charge.

Catalogue imprint

Printed by: Druckhaus Becker GmbH, Dieselstrasse 9, 64372 Ober-Ramstadt
Published by: Sinn Spezialuhren GmbH, Wilhelm-Fay-Strasse 21, 65936 Frankfurt am Main
Authorised representative: Managing Director Lothar Schmidt, chartered engineer

Composition/layout: Kontor Media GmbH & Co. KG

Image editing: DAS STUDIO Torsten Hegner GmbH

Product photos: Achim Küst, Frankfurt am Main; Silvia Frey, Kleinrinderfeld; Volker Wiegmann, Frankfurt am Main

Other photos: Jürgen Jeibmann, Dresden; Stefan Freund, Frankfurt am Main

Photos on pages 20 to 21: German Aerospace Center (DLR), Professor Ernst Messerschmid

Photos on pages 146 and 152: Björn Trotzki

WEEE reg. no.: DE 75393444

Information relating to the fulfilment of the recycling quota and the separate collection of electrical and electronic waste can be found on the website of the Federal Ministry for the Environment:

https://www.bmu.de/themen/wasser-abfall-boden/abfallwirtschaft/statistiken/elektro-und-elektronikaltgeraete/

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As at: february 2023