

SEXTANTS



**„The sea demands
experience – vision – focus.
For over 100 years, we have been bringing
navigation of the highest precision
and unmatched quality on board.“**

CASSENS & PLATH



CASSENS & PLATH TRADITION AND PRECISION

Cassens & Plath was founded in 1902 by Tanne Janssen Cassens – an experienced captain who knew the importance of dependable instruments from his countless voyages.

Founded in Bremen, Cassens & Plath moved to Bremerhaven in 1972, where our offices are today. We build nautical precision instruments including magnetic compasses and sextants. All our products are carefully assembled, adjusted and tested by hand in Germany and adhere to a quality standard that sets them apart.

As of 2014, Cassens & Plath belongs to the ZÖLLNER Group, an expert for sound signal systems on water and land, located in Kiel and headed by CEO Dr. Philipp Murmann.

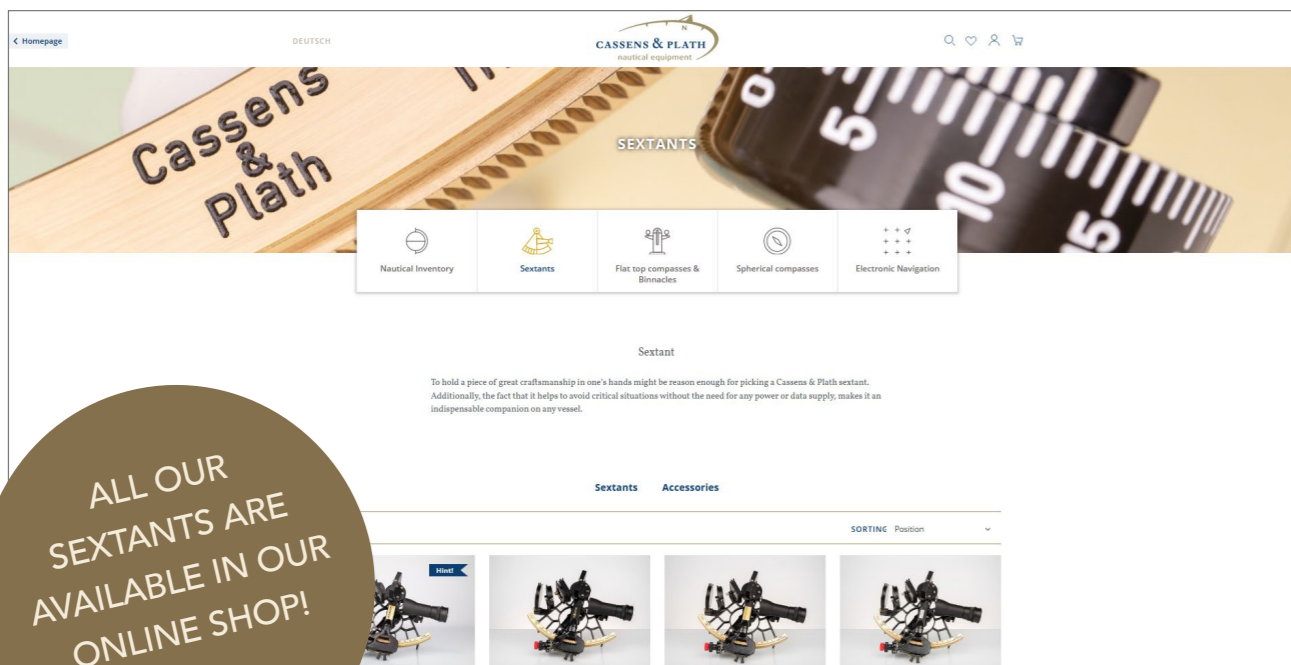
While tending to the production of our reliable product series, we are able and glad to tailor solutions to fit our customers' specific needs and wishes. All the while, the result always combines seafarer-tradition with the latest technical and scientific insights – be it a product directly from our series or a custom solution. Naturally, we guarantee that service and maintenance are available for many years to come. Our workshop, located directly in the Bremerhaven fisheries harbor, houses the best of over 100 years: our modern CNC machining center stands alongside machinery that have been performing their service for several decades.

Almost all components are manufactured in our own production in order to satisfy our high quality requirements down to the last detail. But most of all, it is our 30 employees: their skill, experience, and intricate knowledge mark the difference between an industrially mass-produced product and a handcrafted nautical instrument by Cassens & Plath.



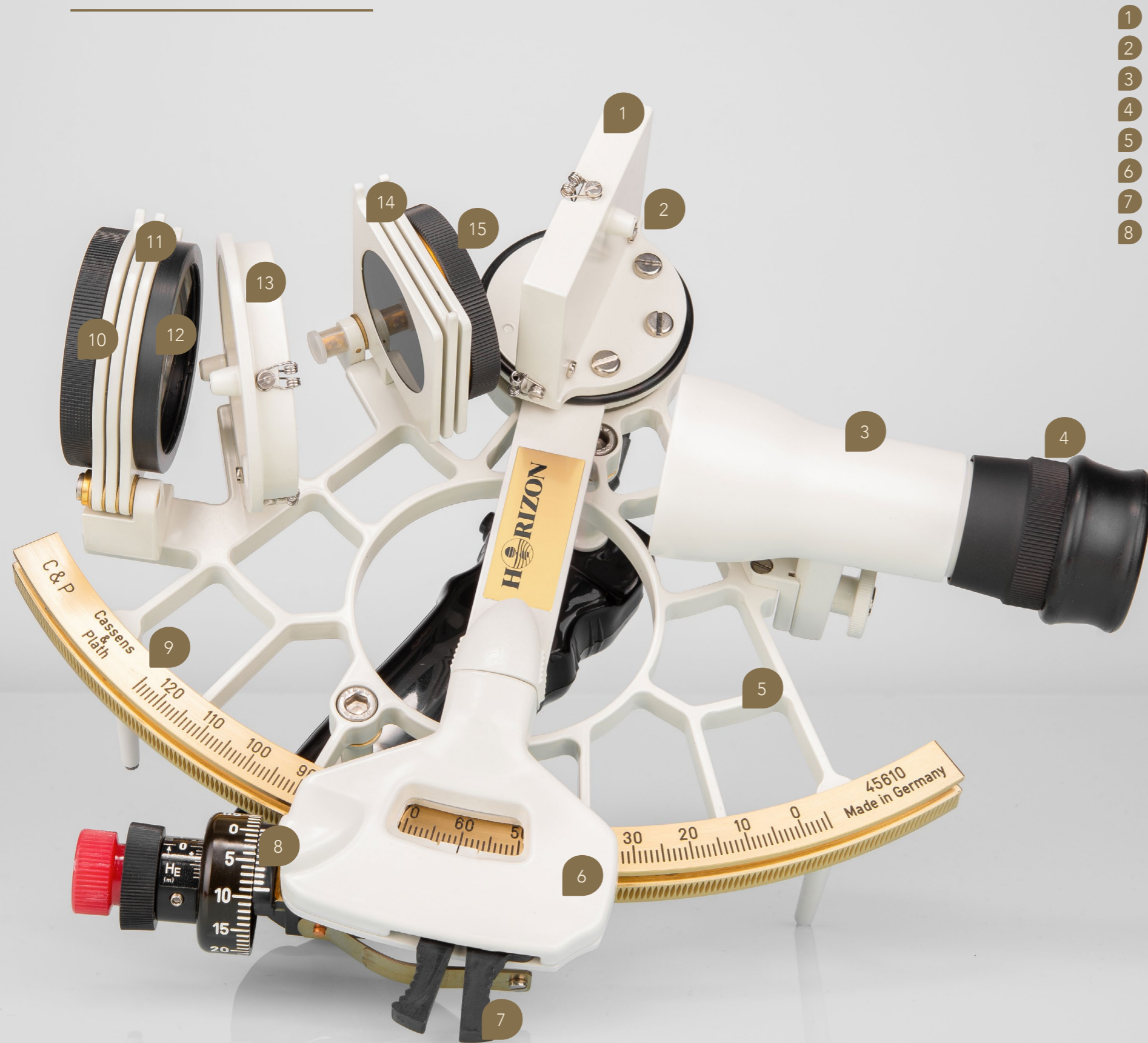
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ALL OUR
SEXTANTS ARE
AVAILABLE IN OUR
ONLINE SHOP!

DESIGN OF A SEXTANT



- 1 Index Mirror
- 2 Mirror Set Screw
- 3 Telescope
- 4 Telescope Focus
- 5 Sextant Frame
- 6 Alhidade/Index Bar
- 7 Clamp
- 8 Micrometer Drum (vernier)
- 9 Arc
- 10 Polarizing Filter
- 11 Horizon Shade Glass
- 12 Double Prism
- 13 Horizon Mirror
- 14 Index Shade Glass
- 15 Polarizing Filter



Our most popular model | HORIZON ULTRA



THE SEXTANT

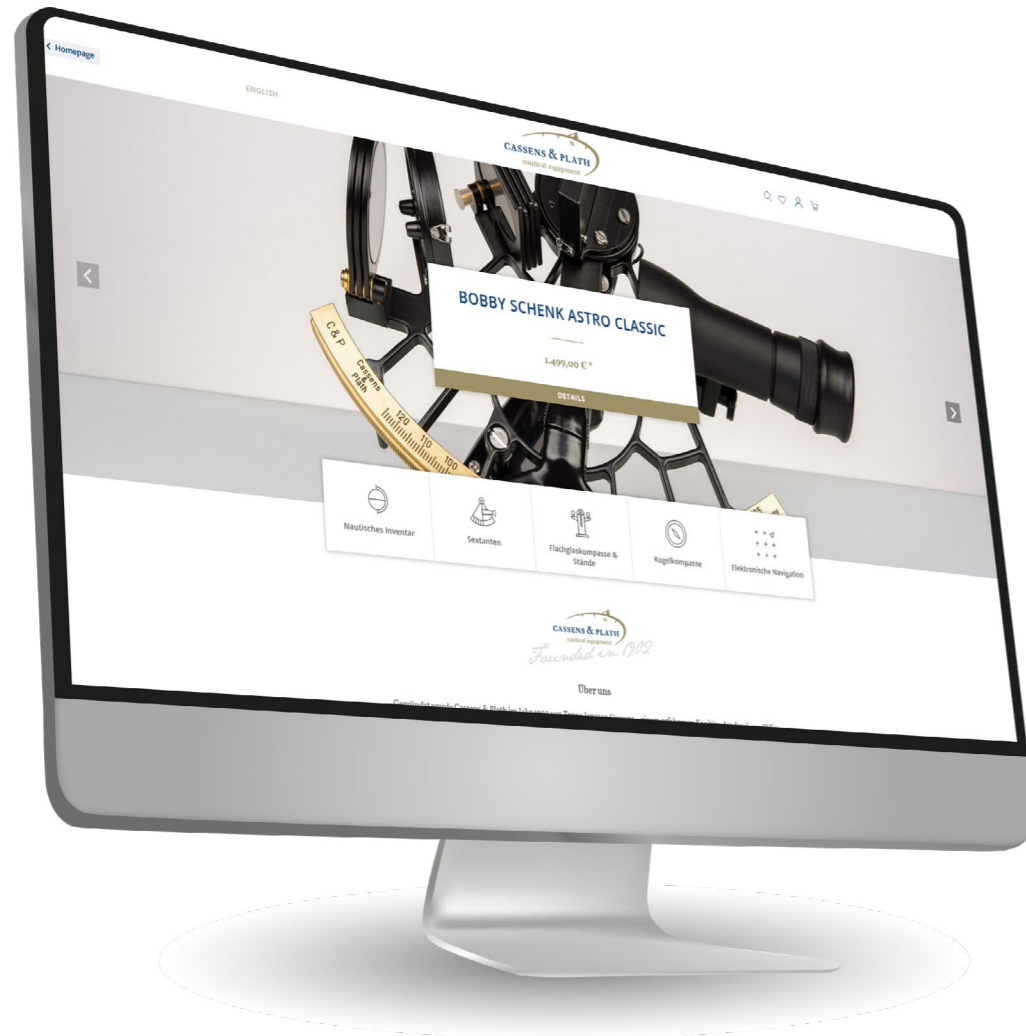
As a reliable companion on all seas, the sextant is still indispensable today. Even in times of satellite navigation, it is part of every ship's basic equipment. But only someone who has experienced the loss of all GPS-instruments truly knows its value. Developed 300 years ago in England, the basic structure with its mirror and arc still defines the outer appearance of the sextant today. Once made of wood, the sextant is now made of metal to withstand wind and weather preventing inaccuracies that may result from the material's exposure to the element.

Sextants by Cassens & Plath have been available since 1902. The one-of-a-kind instruments are created from a symbiosis of tradition and precision, combining centuries of knowledge with modern technology. Thus, our expectations of our employees' work and the materials used are quite high.

The basis for every sextant by Cassens & Plath is a brass plate weighing 5.5 kilograms. What is left in the end is a frame of merely 600 grams. To get to this point, there are countless drillings and millings on a micrometer scale. Eventually the frame is adjusted using well-placed, small strikes to eliminate any torsion in the material – a task that necessitates years of experience and incredibly precise craftsmanship. It takes more than two weeks until a sextant has completed all steps at Cassens & Plath including the adjustment of all optics and a thorough examination of all functions. Only when it has made it through all that, a sextant is ready to be delivered to our customers, who can be sure to have found a reliable companion on board, for which servicing and all spare parts are available for years to come.

To hold a piece of great craftsmanship in one's hands might be reason enough for picking a Cassens & Plath sextant. Additionally, the fact that it helps to avoid critical situations without the need for any power or data supply, makes it an indispensable crewmate on any vessel.











Discover our online shop!

shop.cassens-plath.de/en

PRODUCT PORTFOLIO

Our sextant models are equipped for different observations and requirements. With its polarizing filters and the Schüler-double-prism the HORIZON ULTRA is unbeatable for sun observation. The POLARIS with its clear-view mirror, on the other hand, is perfectly equipped for star and planet observation. Both models can be outfitted with further components thus leaving plenty of freedom during the configuration of your very own, customized instrument.

In addition to the sextants, we offer accessories such as an artificial horizon, chronograph or support-pod. When buying a HORIZON ULTRA, POLARIS or BOBBY SCHENK, our customers can choose between a robust Rough Case and a luxurious wooden case.

SEXTANT	APPLICATION/STRENGTHS	UNIQUE ATTRIBUTES
 HORIZON ULTRA	Sun observation	Polarizing filter Schüler-double-prism
 POLARIS	Star and planet observation	Clear-view mirror Star-spreading glass
 BOBBY SCHENK	All-rounder for sailors	Brainchild of the circumnavigator and author Bobby Schenk
 PROFESSIONAL	Standard sextant	German Federal Maritime and Hydrographic Agency (BSH) approval
 SURVEYING SEXTANT	Geo-data-based horizontal angle measurement	Pentagonal prism for a measurement range up to 215°
 CPSAILING	Inexpensive beginner model	Seawater-resistant aluminum die-cast

SEXTANTS ON TOUR



200 YEARS
OF ACTIVE
SERVICE!



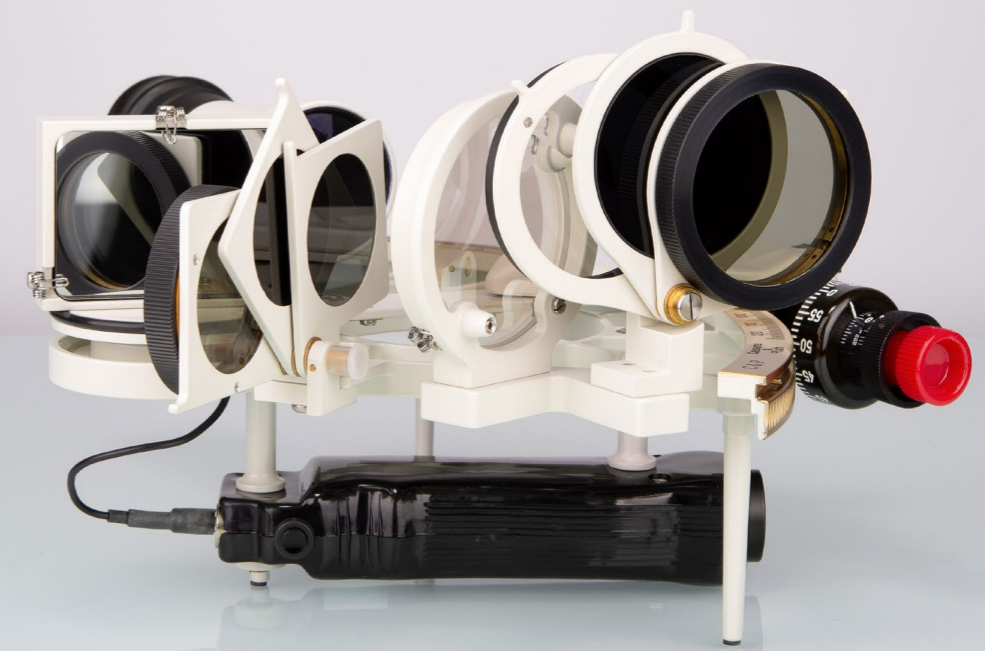
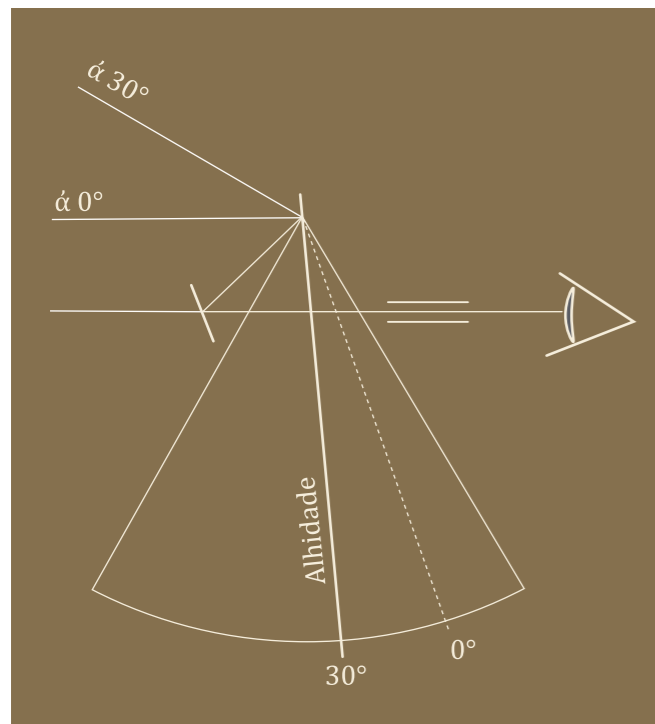
HORIZON ULTRA

With its polarizing filters and the Schuler-double-prism, the HORIZON ULTRA is optimally equipped for sun observation. The double prism redirects the horizon beam to the right and left of the sun's reflection on the water and thus prevents any lighting-related measuring errors. In addition every little sloping of the sextant is immediately visible on the horizon. The polarization filters allow for continuous adjustments toward the horizon as well as the sky. The large mirror makes sure that you never lose sight of the stars, even when the seas are rough and the boat experiences heavy heeling.

Configuration / Scope of delivery

- Black or white
- Rough Case or wooden case
- 4x40 telescope
- Neck strap
- Personalized engraving

For the most beautiful sunsets | HORIZON ULTRA





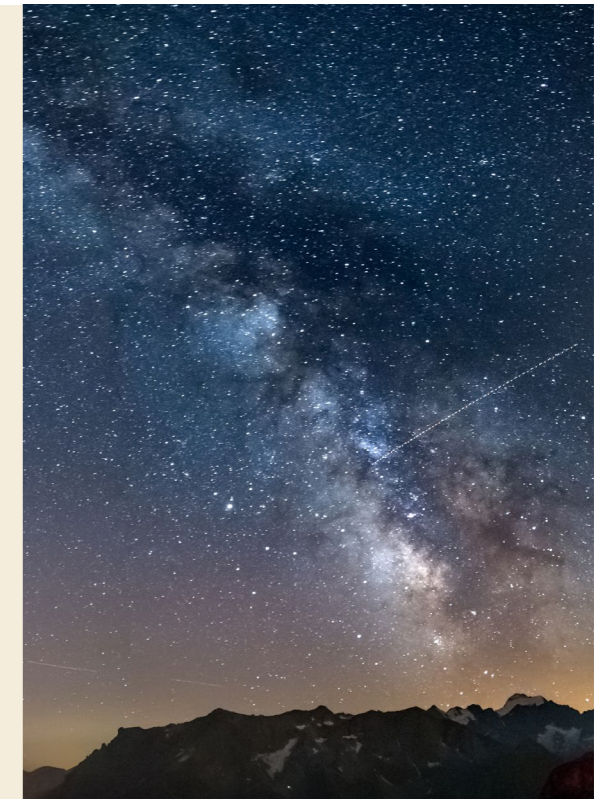
POLARIS

During fix star and planet observation the POLARIS shows its true strengths. The unique clear-view-horizon-mirror combines all advantages of the full-view-mirror with those of the traditional split-view-mirror. In addition, it guarantees a wide field of vision and a precise view of the horizon even during poor visibility conditions. Yet another distinctive feature is the star-spreading glass (astigmatizing lens) which breaks a single point of light into a line, thus eliminating the need to swivel the sextant.

Indirect illumination on the arc as well as on the micrometer drum (vernier) allows for a glare-free reading at night.

Configuration / Scope of delivery:

- Black
- Rough Case or wooden case
- 4x40 telescope
- Personalized engraving



For the magic of the night sky | POLARIS



For adventures on the high seas | BOBBY SCHENK

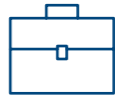
BOBBY SCHENK

This sextant was developed in cooperation with the world-famous yachtsman Bobby Schenk. The frame's white color prevents it from excessive heating when navigating in tropical regions. Nevertheless it is also available in classic black.

Equipped with a full-view-mirror, this model is perfectly suited for sun and twilight observation. Additionally, the drum screw is marked with a scale allowing for index adjustments.

Configuration / Scope of delivery:

- Black or white
- 4x40 telescope
- Rough Case or wooden case
- Personalized engraving

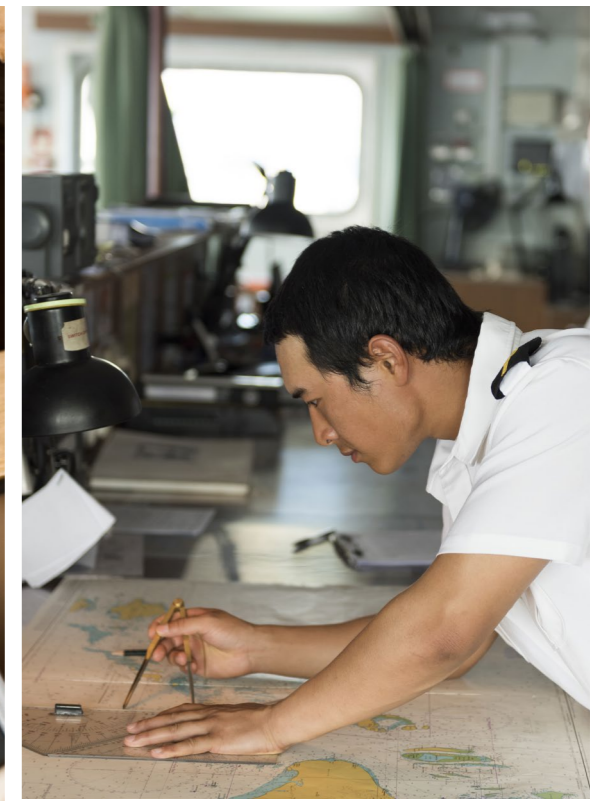


PROFESSIONAL

The PROFESSIONAL Sextant is certified by the German Federal Maritime and Hydrographic Agency (BSH). It can be equipped either with a traditional split-view-mirror or a full-view-mirror. As is the case with all our models, the radius of the arc complies with international standards and meets accuracy tolerances without a doubt.

Configuration / Scope of delivery:

- BSH approval
- Black
- 4x40 or 6x30 telescope
- Full-view or split-view
- Light-weight plastic case
- Rough Case or wooden case for additional charge



For the most demanding jobs | PROFESSIONAL



SURVEYING SEXTANT

The surveying sextant is made for geodetic horizontal angle measurement. It is a regular drum sextant with a split-view-mirror but without shadow glasses or illumination. The normal measuring range of -5° to 125° can be widened by 90° when attaching a pentagonal prism. The measuring range thus encompasses 215° . The surveying sextant comes with an additional vertical grip and a tripod-adapter.

Configuration / Scope of delivery:

- With or without pentagonal prism
- Black
- 4x40 telescope
- Wooden case

Always precise - also on land | SURVEYING SEXTANT



CPSAILING

The frame of the CPSailing is made of seawater-resistant aluminum. It can be equipped with a full-view or traditional split-view-mirror. The mirrors as well as the filters are made of high-quality materials and guarantee longevity and low distortion errors.

Configuration / Scope of delivery:

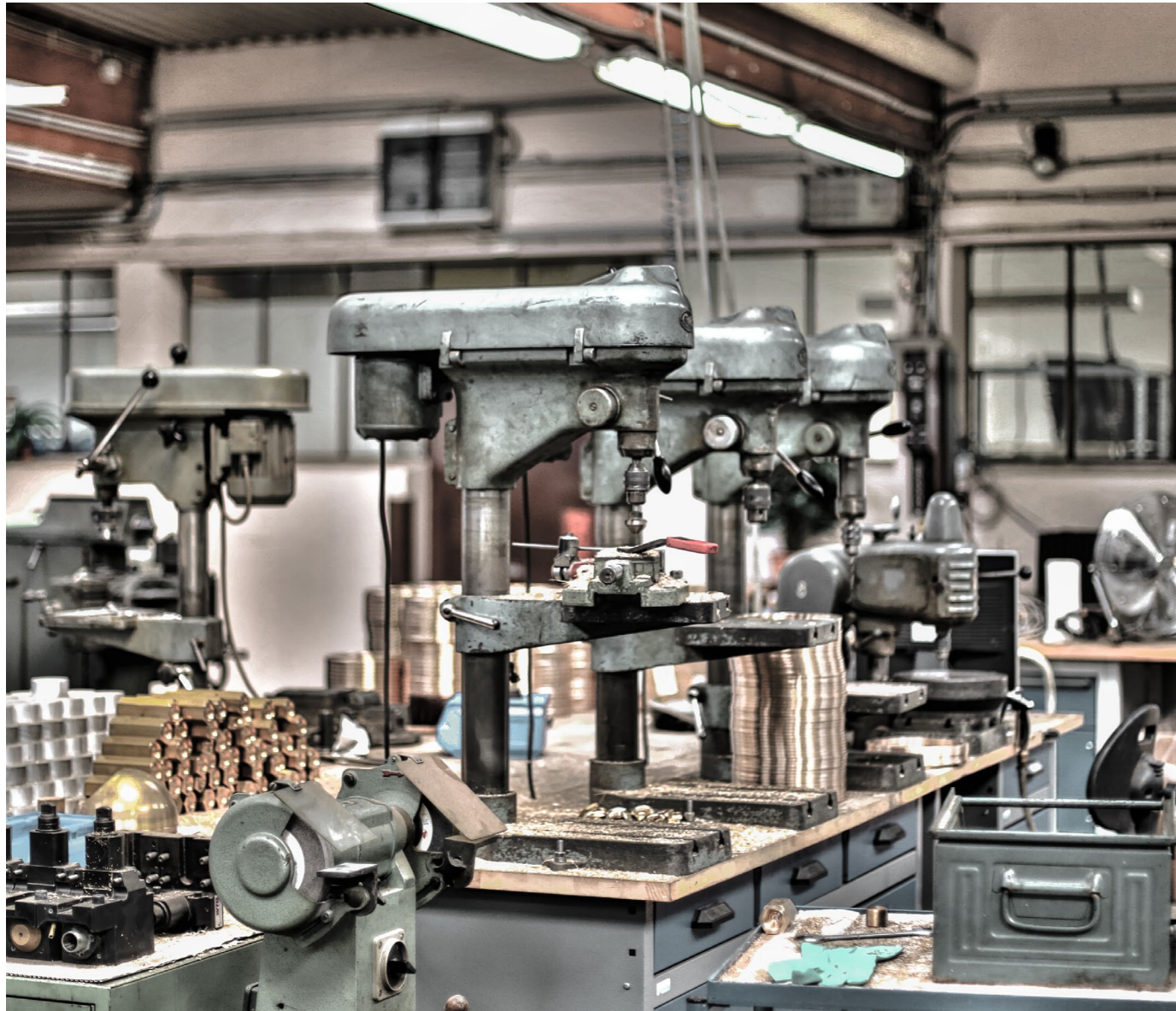
- Black
- 4x40 or 6x30 telescope
- Full-view or split-view
- Wooden case

Our Beginner-Model | CPSAILING



SEXTANTS

POSITION DETERMINATION PAR EXCELLENCE



Get in touch with us!

Place orders here:

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 Telefax: +49 471 483 999 10
 E-Mail: sales@cassens-plath.de
 Website: www.cassens-plath.de/en

**Or visit us at the
 Cassens & Plath compass house!**

Cassens & Plath GmbH
 Am Lunedeich 131
 27572 Bremerhaven
 Germany



ORDER PROCESS

In person	Onlineshop
 All products online	All products online
 Consulting services via telephone	
 Configure your sextant	Configure your sextant
 Detailed quotation	Optional: Request a detailed quotation
 Order	Order
 Production according to your wishes	Produced according to your wishes
 Your sextant will be shipped	Your sextant will be shipped



Configure your sextant online to match your needs and preferences!

ALWAYS A COMPANION ON BOARD



„The quality of the optics is second to none and the adjustable polarized shade glasses are one of the reasons why the HORIZON ULTRA is my favourite sextant“
Tapio Lehtinen



„Astro-navigation, navigation by the sun, the moon, and the stars, is the only absolutely reliable method of navigation for world-wide faring on the high seas.“
Bobby Schenk



As a brand with a long tradition, Cassens & Plath, has been working with different people from the professional and semi-professional worlds of seafaring and sport sailing. The Finnish circumnavigator Tapio Lehtinen, for example, used the HORIZON ULTRA to navigate the Golden Globe Race 2018 and was one of the few sailors to successfully reach the finish line.

ACCESSORIES AND SPARE PARTS

With additional accessories and components you can customize your sextant to fit your personal needs. If you wish, we offer spare components and an all-around service through our workshop.

PRODUCT AND REFERENCE NUMBER	IMAGE	DESCRIPTION
PROFESSIONAL BUBBLE HORIZON 47100 S (BLACK) 47100W (WHITE)		For observations without a visible horizon. Well-suited for attachment on all Cassens & Plath sextants with illumination. Suitable for navigation
PRACTICE BUBBLE HORIZON 44770		This artificial horizon is solely for practicing purposes.
UNIVERSAL SIGHTING TUBE 44300		Zero magnification. Well-suited for double-eyed night observation.
4 X 40 PRISM-TELESCOPE 44000S (BLACK) 44000W (WHITE)		Standard telescope for sextants. Simple mounting using the clamp of the sextant.
6 X 30 PRISM-TELESCOPE 44200 (BLACK)		Well-suited for navigation on, larger ships and for terrestrial navigation.

BEZEICHNUNG	ABBILDUNG	BESCHREIBUNG
SEXTANT SUPPORT-POD 49100		The support-pod allows for comfortable and safe observations over longer periods of time.
PRISM LEVEL FOR RETROFIT BY SELF-ASSEMBLY 44100S (BLACK) 44100W (WHITE)		Similar function as the Schüler double-prism.
CHRONOGRAPH WITH MOUNTING OPTION FOR SELF-ASSEMBLY 85092		For precise and simple measuring of time.
WOODEN CASE 40203		Attractive wooden case with brass hinges and screen printing on the inside and out.
ROUGH CASE 40204		Robust plastic case for safe sextant transport. The case is water tight, shockproof and buoyant.
NAVIGATION CALCULATOR STARPILOT 40954		This navigation calculator encompasses all programs for celestial navigation using a sextant. The calculator comes with a hardcover as well as a CD with instructions (in English) and a guide for emergency navigation. The perpetual internal almanac of the sun, the moon, and the planets as well as 173 stars for all the years up to 2100 is included.

DATASHEET

PRODUCT	HORIZON ULTRA	POLARIS	BOBBY SCHENK	BOBBY SCHENK ASTRO CLASSIC		PROFESSIONAL FULL-VIEW	PROFESSIONAL SPLIT-VIEW	SURVEYING SEXTANT	CPSAILING
REFERENCE NUMBER	430170s 430170w	420070	410270s 410270w	410270c		410070 4x40 410080 6x30	400070 4x40 400080 6x30	461020 w/ pentagonal prism 461000 w/o pentagonal prism	414000 4x40 FV 414080 6x30 FV 404000 4x40 SV 404080 6x30 SV
COLOR	black white	black	black white	black		black	black	black	black
TELESCOPE	4x40	4x40	4x40	4x40		4x40 or 6x30	4x40 or 6x30	4x40	4x40 or 6x30
HORIZON MIRROR	Full-view	Clear-view	Full-view	Full-view		Full-view	Split-view	Split-view	Full-view (FV) or split-view (SV)
POL FILTER	✓								
SCHÜLER DOUBLE-PRISM	✓								
NECK STRAP	✓								
NON-SLIP FEET	✓								
STAR SPREADING GLASS		✓							
INDEX ADJUSTMENT	✓	✓	✓	✓					
HORIZON DEPTH ADJUSTMENT	✓	✓							
MEMORY FILM	✓	✓	✓	✓					
NAME ENGRAVING	✓	✓	✓						
PENTAGONAL PRISM								✓	
BSH MODEL						✓	✓		
ILLUMINATION	✓	✓	✓	✓		✓	✓		✓
FRAME MATERIAL	Brass	Brass	Brass	Brass		Brass	Brass	Brass	Aluminum die-cast
CASE	Wooden case or rough case	Wooden case or rough case	Wooden case or rough case	Light-weight plastic case		Light-weight plastic case	Light-weight plastic case	Wooden case	Wooden case
SEXTANT WEIGHT	1.8 kg	1.8 kg	1.8 kg	1.8 kg		1.8 kg	1.8 kg	1.8 kg	1.3 kg
WEIGHT INCLUDING CASE	5.5 kg	5.5 kg	5.5 kg	3.1 kg		3.1 kg	3.1 kg	5.5 kg	5.0 kg
CASE MEASUREMENTS (L X W X H) MM	320x365x185 80x310x190	320x365x185 380x310x190	320x365x185 380x310x190	350x270x165		350x270x165	350x270x165	320x365x185	340x270x160

IMPRINT

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