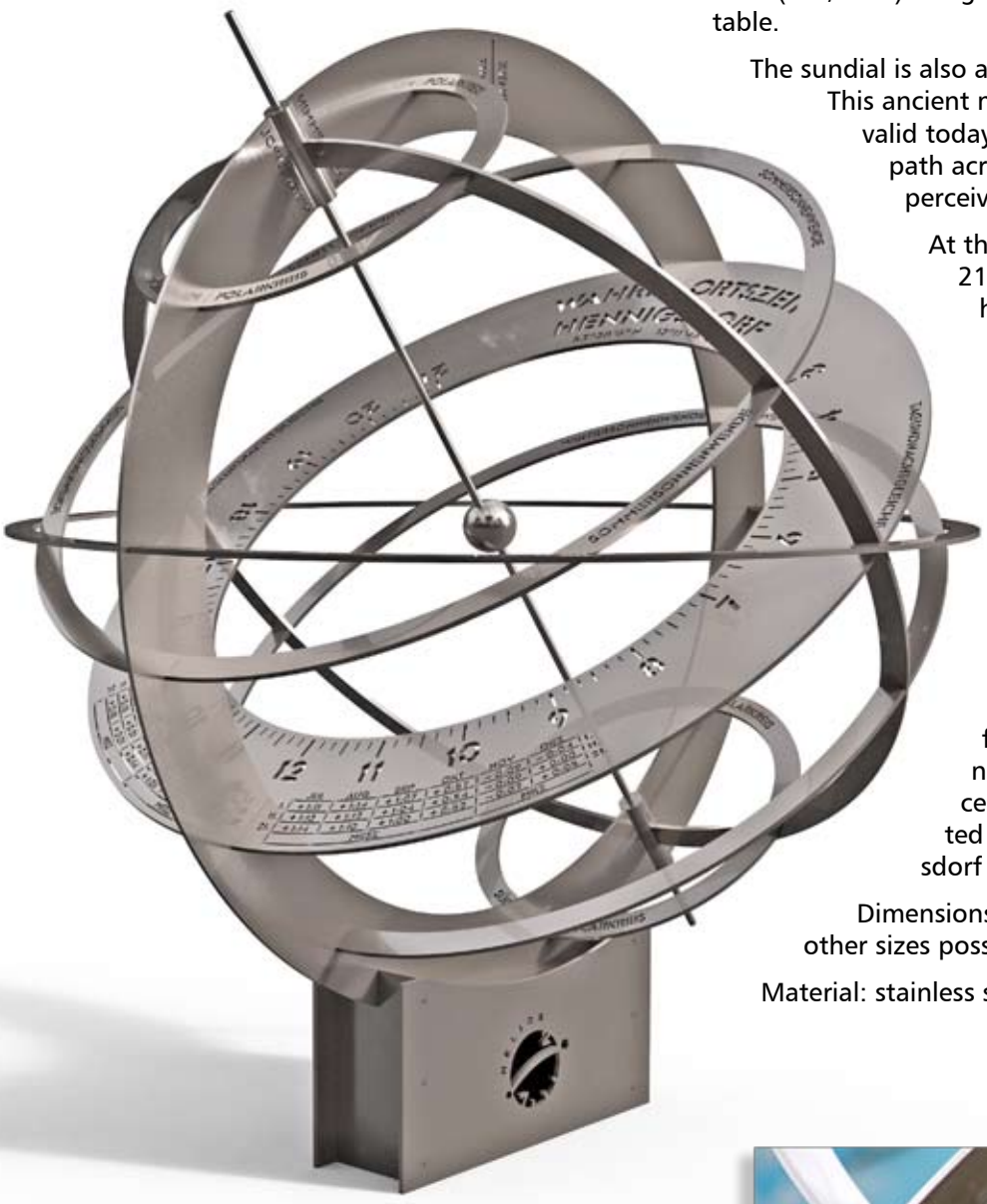
VASCO DA GAMA

Geocentric Celestial Globe



The equatorial sundial displays Local Apparent Time (LAT). You can calculate Central European Time (CET/CEST) using the integrated CET/CEST table.

The sundial is also a geocentric celestial globe. This ancient model of the universe is still valid today for displaying the Sun's path across the skies exactly as we perceive it from the Earth.

At the summer solstice on June 21, the sun migrates on its highest and longest path in the sky. The summer begins. The orbits of the equinoxes (beginning of spring and autumn) and the winter solstice (beginning of winter) can be found when you project the respective circles from the center of the celestial globe (earth) to the sky.

We manufacture the sundial for the geographic coordinates of your location. The celestial globe was first created for a public park in Hennigsdorf near Berlin.

Dimensions: Ø1800mm x H2000mm, other sizes possible.

Material: stainless steel

CURRICULUM SOLIS

Interactive Celestial Globe

The interactive celestial globe is not only a sundial, but also an instrument that can simulate the daily Sun's path at different seasons.

The model of the celestial globe comes from ancient times. At that time it was imagined that the Sun, the Moon and the stars - fixed on crystal balls - moved around the Earth in the center. Even if we know since Copernicus that it is not so, the geocentric model from antiquity still has its own right to exist, because it shows what we see. The apparent migration of the Sun in the sky can be followed on the sundial. Just like the daily rotation of the Earth around the axis and the annual migration around the Sun.

The sundial is made for the geographic coordinates of the site. The base is made of black lacquered steel, on request also in anthracite metallic. The tag side above the horizon is planted with stainless steel plate, from which the inscription is cut out, so that the black background appears. The night below the horizon remains black.

The celestial globe is available in various sizes: 550mm, 1100mm and 2000mm diameter.

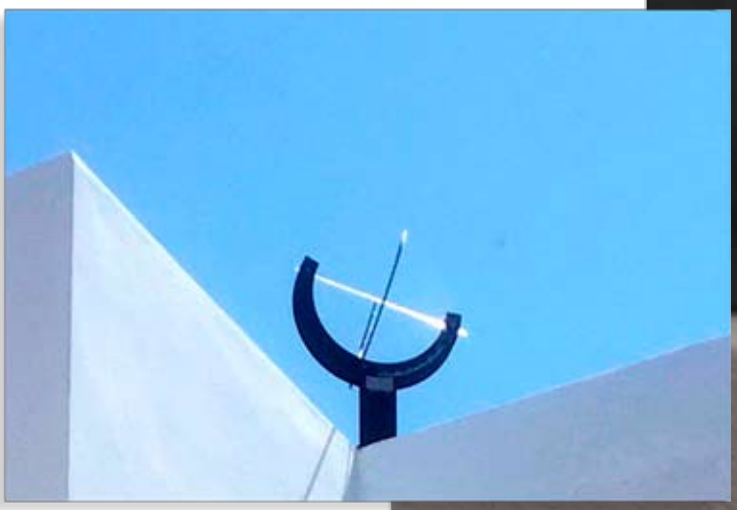
AEQUINOX

Equitorial sundial

The AEQUINOX, an all-purpose equitorial sundial which can be erected in the garden or on the balcony, rounds off our product range. Its impressive size (meridian ring circumference: 440mm, height of lower stand: 670mm, with high stand: 1400mm) makes it an eyecatcher in any surroundings. The anthracite-metallic finish and the sanded steel scale give the AEQUINOX its unique appearance.

The AEQUINOX comes with a levelling base plate. The sundial can be set up precisely horizontal using three fine-threaded knurled screws. The knurled screws are hollow and can be used to mount the sundial on the supporting surface using rawl plugs and machine screws. The latitude of the location is set to an accuracy of 0.1° using the nonius scale. The equatorial face is adjusted during manufacture to be vertical to the polar wand which is parallel to the Earth's axis. Using the illustrated manual, you can easily set up and adjust the sundial. It will then permanently display true noon at your location absolutely accurately.

The AEQUINOX is also available in a custom-made XXL version with a diameter of 150 cm and a height of 250 cm.



AEQUINOX at Arequipa (Peru)
Photo: M. Deiwick

MONDO

All the time in the world

A globe sundial with a time ring to display any zone time (i.e. Central Europe CET/CEST) and the noon position of the Sun. The time ring, which was specifically developed for the MONDO, contains light conductors which catch the Sun and illuminate light segments on the surface. The light segments light up in sequence with the apparent movement of the Sun across the globe and display the time and the Sun's position.

In the eternal play of light and shade, you can track day and night, sunrise and sunset, polar day and polar night on the globe sundial. Adjusted for the geographic coordinates of your location, the globe is always lit up in the same way as the Sun lights the Earth.

Globe made from a sanded stainless steel casts. Manufactured in a lost wax melting process, the wax model and the ceramic mould are each used for only one casting and are produced from scratch for each new globe. Careful artisinal crafting and a wealth of experience is required for this casting process, which is steeped in tradition. The globe (16cm in diameter) and all other parts are manufactured from stainless steel. The optical element integrated in the time scale ring is made of weatherproof acrylic glass. The sundial can be used outside all year round.

The MONDO can be mounted on an adjustable base on an appropriate pedestal. Also stands from stainless steel or granite are available.

MAGELLAN

Discover time!

Our daily life is determined by the transition from day to night. As a result of the Earth's rotation, the Sun moves tirelessly from east to west, the location at which the Sun reaches its meridian altitude, i.e its highest point at noon, changes continuously. The MAGELLAN sundial displays the Sun's path around the globe in a totally original way.

With the MAGELLAN you can follow the Sun's migration across the Earth using the noon adjusting arm, which you swivel in the Sun until the shadows to the right and the left of the arm disappear. The noon adjusting arm is then positioned directly above the latitude at which the Sun is culminating at this moment in time. This means that the Sun is currently reaching its local culmination at all locations along this line of latitude, it is now noon. At one location along this line of latitude, the Sun's rays meet the Earth vertically, here the Sun is at its zenith. Its so-called sub-solar (below the Sun) point is displayed on the noon arm. The sunlight penetrates the narrow slits in the noon adjustment arm, is reflected to the side and illuminates small light segments, which are at their brightest when they point directly towards the Sun. You can ascertain the sub-solar point and read off the date at the most brightly-lit light segment.

The MAGELLAN has already been chosen several times as state gift of the German Federal President to other Heads of State.

MAGELLAN XXL

Discover time!

The Globe Sundial MAGELLAN XXL with a 350mm globe made of bronze is the big sister of the MAGELLAN with 160mm globe diameter made of stainless steel. Due to its attractive size and stable construction, the XXL version is particularly suitable for parks, company entrances and public areas, but also for the spacious private garden.

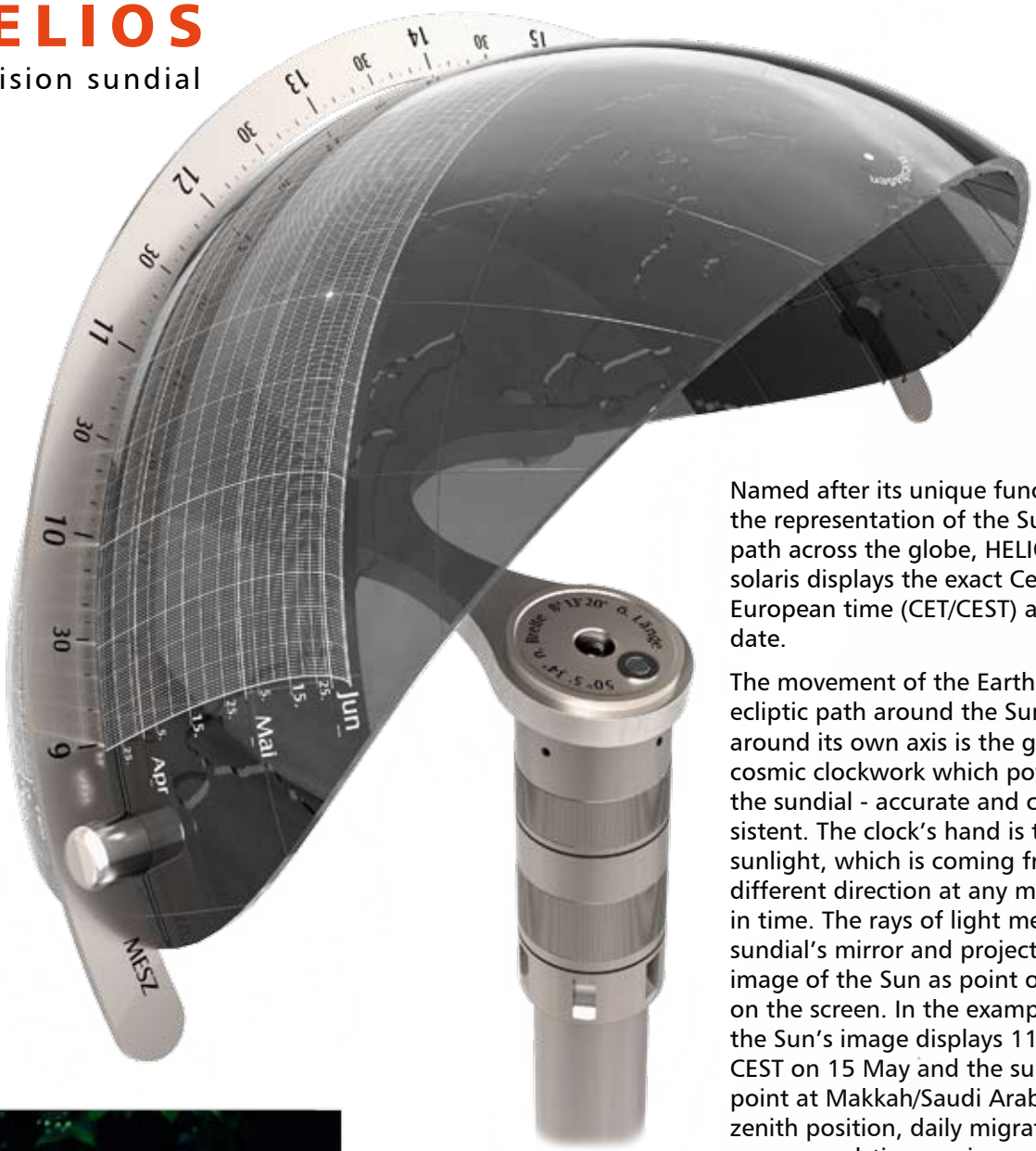
Adjusted exactly for its location's latitude and longitude, the MAGELLAN globe takes up the same position as the Earth. The sunlight continually illuminates the steel globe just like our planet, so that day and night are clearly visible. The terminators of sunrise and sunset can also be seen.

The globe is crafted in demanding craftsmanship in the traditional bronze foundry KunstgussKastel coveted by renowned artists.

The MAGELLAN XXL is an attractive, globally unique sundial, which can not be surpassed in terms of clarity and functional diversity.

HELIOS

Precision sundial



Named after its unique function, the representation of the Sun's path across the globe, HELIOS Subsolaris displays the exact Central European time (CET/CEST) and the date.

The movement of the Earth in its ecliptic path around the Sun and around its own axis is the gigantic cosmic clockwork which powers the sundial - accurate and consistent. The clock's hand is the sunlight, which is coming from a different direction at any moment in time. The rays of light meet the sundial's mirror and project the image of the Sun as point of light on the screen. In the example, the Sun's image displays 11:00 CEST on 15 May and the sub-solar point at Makkah/Saudi Arabia. The zenith position, daily migration, seasons, solstice, equinox - the Sun itself makes these natural phenomena visible on the HELIOS sundial.

The HELIOS Subsolaris has a diameter of 290 mm and is 1250 mm high.

POLARIS XXL

But it does move

"But it does move", the Italian physicist, mathematician, philosopher and astronomer Galileo Galilei is supposed to have murmured, when he was forced to renounce the Copernican system at an advanced age, standing before the Inquisition. In the meantime, Galilei has been rehabilitated by the church and today we know without a doubt that the Earth revolves around the Sun and around its own axis, which points toward the Polaris.

Equatorial sundial displaying any standard time in the world. Display of global position of the Sun on integrated world maps. World maps made from thermally layered mineral glass. The sundial is custom made for your location.

We offer the POLARIS XXL with the diameter 350, 600 and 1000mm. We also have stands for the sundial.

CHRONOS

Precision sundial

You can often hear the viewer of a sundial say: „It is wrong!“, because he is comparing sundial time with that of the wristwatch. In fact, this is unfair: the sundial's display of true solar time (officially known as local apparent time or LAT) is absolutely correct.

In contrast, the time on the wristwatch is an average time, invented by man, which refers to a certain longitude, the time zone meridian. This is called zone time or standard time, in Central Europe this is the Central European Time (CET/CEST).

Standard time is not so easy to display on a sundial. During the year, the sundial may be 17 minutes fast and 15 minutes slow compared to the average.

As early as the 19th century, Major General John Ryder Oliver invented a sundial (British Patent No. 1660 of 1892), which indicates the local mean time.

With the help of a rotationally symmetrical body, the shadow is shifted by the difference of the equation of time as a function of the seasons. In 1966, the German sundial designer Martin Bernhardt further improved this principle with the Bernhardt's roller, named after him.

The CHRONOS precision sundial CET/CEST is also equipped with time-equalizing rollers. On the time scale, Central European Time (CET/CEST) or any other standard time can always be read off at the intersection of the leading shadow (right) with the circumferential center line (equator line).

The diameter of the dial is 300 mm, the total height of the sundial is 570 mm or with a high stand 1350 mm.