

# High Precision Refractive Surgery

جراحة تصحيح عيوب النظر الانكسارية  
عالية الدقة

World leading  
experts in  
eye care



**Moorfields  
Eye Hospital Dubai**  
A branch of Moorfields London



مستشفى كينغز كوليدج لندن  
King's College Hospital London

# Schwind Amaris 750S

When you decide on an eye laser treatment, you expect the best possible results. The more fully developed the methods are, the better the outcome will be. The SCHWIND AMARIS 750S offers you the leading technology for your laser treatment – superior in all important aspects: Speed, precision, safety and comfort.

## Minimum treatment time

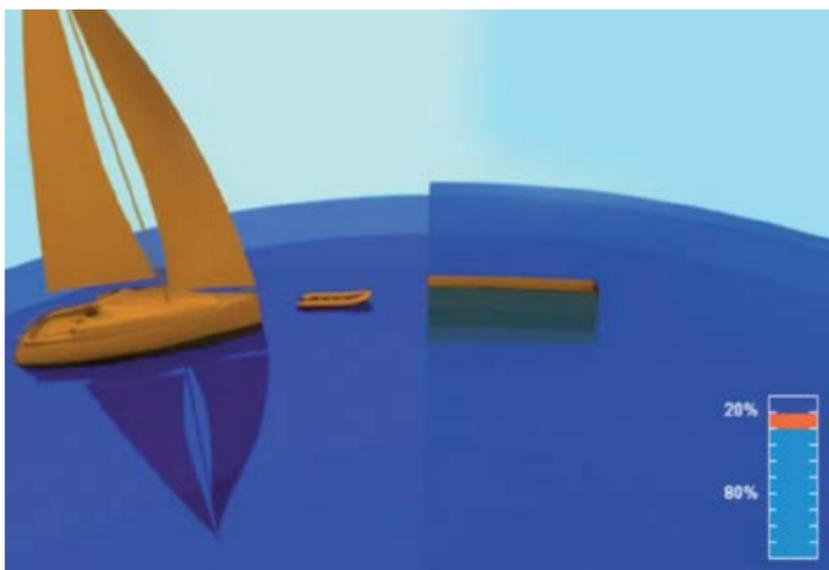
The SCHWIND AMARIS 750S works two to three times faster than other laser systems. 750 tiny light flashes per second shape the corneal surface. It is extremely fast and corrects one dioptre of myopia within 1.5 seconds, and eight dioptres are ablated within 13 seconds.

## Automatic Fluence **Level** adjustment

In order to perfectly combine speed and precision, the SCHWIND AMARIS 750S is equipped – besides a 750 Hz pulse frequency – with two energy levels.

At first, the SCHWIND AMARIS 750S uses a high energy level and rapidly ablates around 80% of the tissue to be removed – like a fast yacht quickly heading for the safe harbour.

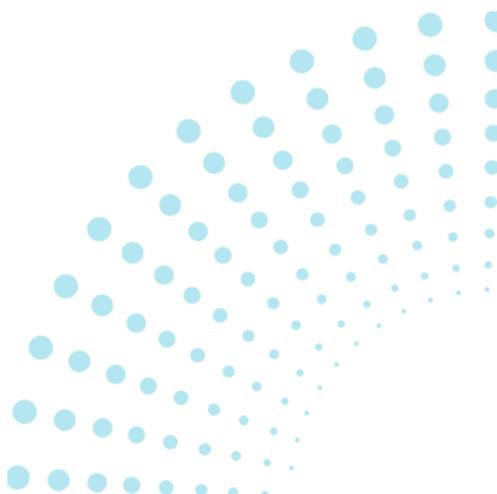




How long the powerful beams are applied depends on your individual refractive error and is continuously checked by the software during the treatment. Like a small sport boat then exactly navigates to a narrow landing, a gentler beam ablates the remaining 20%, thus achieving the especially smooth surface required for excellent vision.

## Eye tracking in six dimensions

The eyes can involuntarily move in all directions for milliseconds while fixating on the laser light. The SCHWIND AMARIS 750S eye tracker monitors the position of the eye with approximately 1050 measurements per second and thereby compensates any deviation up to the sixth dimension.



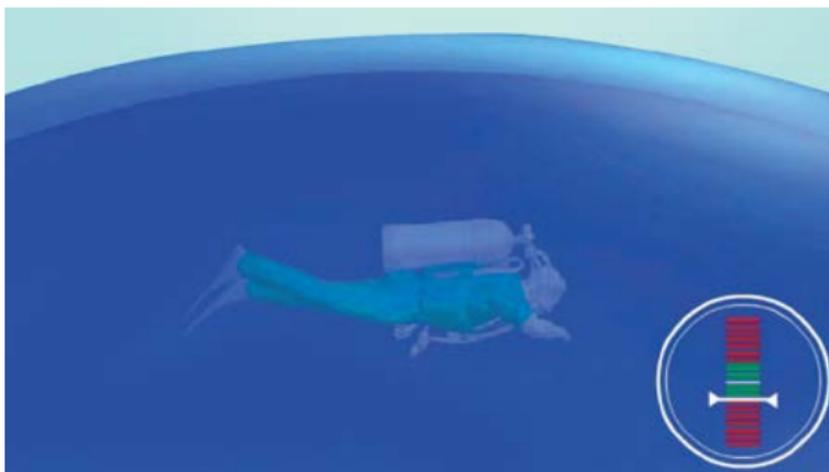


Imagine your eyeball being a buoy in the sea: when the sea is calm, the buoy shifts from the left to the right or forward and backward. In swell, however, the buoy tilts to the side. Furthermore, a buoy also turns around its anchorage or moves upward and downward.

In the same manner, your eyeball can roll (rotation), rotate around its own axis (cyclotorsion) or move up and down along the z-axis. The eye tracker of the SCHWIND AMARIS 750S detects all these eye movements and compensates for them. With cyclotorsion control, the compensation occurs statically between the sitting and the lying positions of the patient, and dynamically during the laser treatment itself.

## Permanent measurement of corneal thickness

Similar to a diver orientating himself in water with his depth gauge, your doctor is permanently informed through the online pachymetry of the SCHWIND AMARIS 750S.



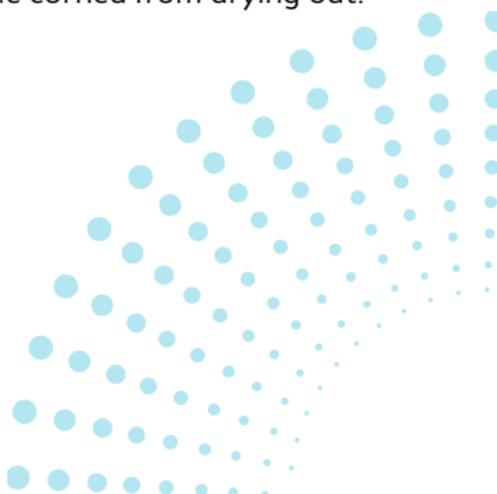
This system measures the changes of corneal thickness in real time and displays them on the treatment screen. Thus your doctor knows at all times how much tissue has been ablated and the remaining thickness of the cornea.

## Exceptionally fine **laser beam**

The laser beams of the SCHWIND AMARIS 750S have an exceptionally small diameter of only 0.54 millimeters and are thus significantly smaller than others. Furthermore they have a special shape. Your cornea becomes especially smooth with this fine beam.

## Constant **microclimate**

With the SCHWIND AMARIS 750S, two specially formed nozzles ensure a directed, fine airflow that creates a stable microclimate across the cornea. The climatic conditions remain constant, preventing the cornea from drying out.



## Unique **thermal control**

The SCHWIND AMARIS 750S is equipped with a unique thermal control system. Even at high ablation speed the corneal tissue is effectively preserved. The laser pulses are temporally and spatially sorted, which gives the individual position on the cornea sufficient time to cool off. Following pulses can thereby approach an already cooled position faster.

## Clinical **results**

A multitude of international clinical studies have documented the excellent treatment quality with SCHWIND AMARIS technology. Visual acuity of 6/6 (100%) or better was achieved in the vast majority of the cases. A high percentage of treated patients could see better than what they saw before with glasses or with contact lenses. The study results also showed improved contrast vision.



# Technology at its best

750 Hz pulse frequency / Automatic Fluence Level Adjustment

- ▶ Maximum precision, minimum treatment time, 1050 Hz and 6D eye tracker
- ▶ Registration and compensation of the slightest eye movements up to the sixth dimension

Exceptionally small laser beams

- ▶ Very smooth treatment surfaces

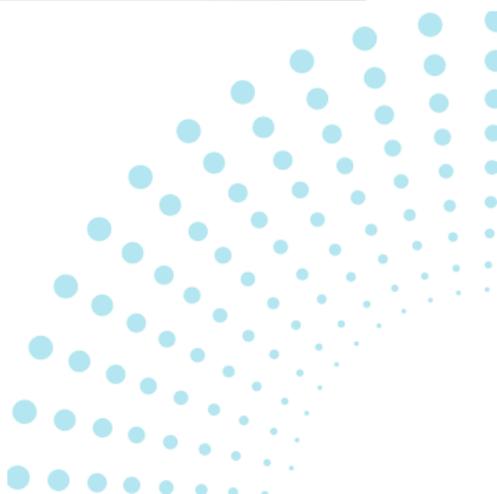
Permanent measurement of corneal thickness

- ▶ Safety at every point in time

Thermal control

- ▶ Gentle ablation of corneal tissue

[www.schwindamaris.com](http://www.schwindamaris.com)



## Moorfields Dubai



# Moorfields Eye Hospital Dubai

A branch of Moorfields London

### Moorfields Eye Hospital Dubai

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### Opening hours:

Saturday to Thursday, 8.30am to 5.30pm,  
for information and advice on eye conditions and  
treatments from experienced ophthalmic trained staff.



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