SCHWIND
eye-tech-solutions

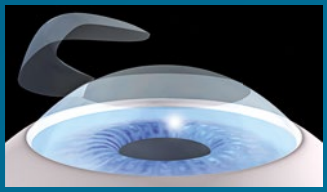
Excellent outlook for your eyes:
With SCHWIND AMARIS® technology

Comfortable, fast and safe

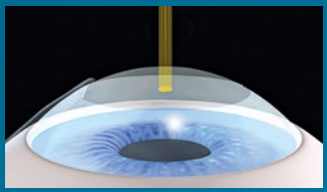
The SCHWIND laser eye procedure

When performing laser procedures, eye surgeons apply the laws of physics. The overall refractive power of the eye is modified so that the light strikes the retina correctly again. The most commonly used method is LASIK (laser in situ keratomileusis), in which an extremely thin corneal flap is prepared on the eye. The eye surgeon folds that flap over to one side. In this way, the pulses of the excimer laser strike the interior of the cornea directly and remove a few micrometres of tissue, depending on the degree of correction required. Immediately thereafter, the flap is carefully repositioned into its original position. The corneal flap adheres securely and grows back together with the rest of the cornea. The surface treatment TransPRK works without the need to prepare the cornea. Here, the SCHWIND AMARIS technology penetrates the regenerative surface layer of the cornea (epithelium) to remove tissue without touching the eye at all.

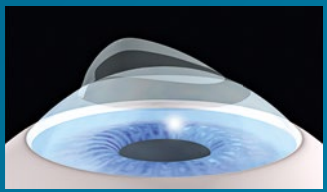
LASIK procedure



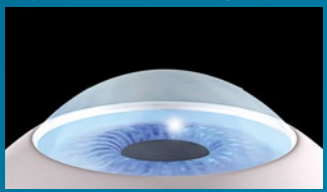
Flap is prepared.



Tissue is removed.

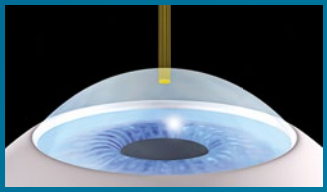


Flap is placed back in its original position …

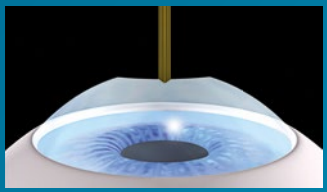


… and adheres there on its own.

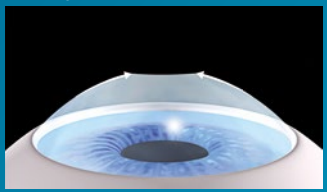
TransPRK procedure



The excimer laser removes tissue …



… through the surface layer of the cornea.



The surface layer of the cornea regrows.

Why be treated with a laser? Why SCHWIND?

The reasons to be treated with a laser vary widely. Personal attitudes about beauty and attractiveness might play a role. And people who enjoy active sports or find it uncomfortable to wear glasses or contact lenses are glad to dispense with corrective lenses. SCHWIND AMARIS technology provides the ideal treatment of short-sightedness, long-sightedness, astigmatism, higher-order visual defects and presbyopia. Very high ablation speed enables the eye specialist to complete the procedure in an extremely short period of time. The corneal tissue is preserved and an exceptionally smooth surface is achieved. The unique eye tracking system actively compensates for even the slightest eye movements. In this way, the positioning of the next laser pulse is adjusted at lightning speed – and provides for the greatest possible treatment reliability. SCHWIND AMARIS laser systems have proven reliable in thousands of applications and offer the leading technology for laser eye surgery. This is documented by excellent clinical results in numerous scientific publications. AMARIS technology has earned many national and international awards.

SCHWIND AMARIS® Laser
Your benefits at a glance:

- **Maximum precision – minimal treatment time**
  > Very high ablation speed, automatic fluence level adjustment
- **Extremely safe and reliable through compensation of the slightest eye movements**
  > Highly advanced eye tracking
- **Very smooth corneal surfaces**
  > Extremely small laser spot
- **Gentle tissue ablation**
  > Intelligent thermal control system
- **Continuous monitoring**
  > Constant measurement of corneal thickness

Frequently asked questions

Why does AMARIS technology use two energy levels?

The two energy levels of the SCHWIND AMARIS laser are matched to one another, ensuring the perfect combination of speed and precision. About 80 percent of the corneal tissue is removed very quickly with high energy. A gentler beam ablates the remaining 20 percent, thus assuring an especially smooth surface.

Why is precise eye tracking so important?

Even under complete concentration, the eyes make slight, involuntary movements which cannot be suppressed – also when the patient fixates on the green light. That's why exact centring and constant positioning of the eye is especially important for a precise and safe procedure. With the SCHWIND AMARIS eye tracker, all of the movements which the eye can make are recorded and actively compensated 1050 times per second.

How long does the procedure take?

The actual laser treatment takes only a few seconds. For a myopia of -8 dioptres, for example, the SCHWIND AMARIS laser ablates the required quantity of corneal tissue in 12 to 15 seconds according to the used model. The complete treatment of both eyes takes about ten minutes.

How well will I be able to see after the procedure?

Clinical studies with SCHWIND AMARIS technology have shown that patients often see better after laser treatment than they did previously with glasses or contact lenses. Nearly all patients see just as well as they did before when they wore corrective lenses. The results of the studies also show an improvement in contrast sensitivity.

For more information, please visit:
www.schwind-amaris.com

Ask your specialist about SCHWIND AMARIS® technology

SCHWIND eye-tech-solutions GmbH & Co. KG
Mainparkstraße 6–10 · D-63801 Kleinostheim · Germany
email: info@eye-tech.net · www.schwind-amaris.com