

# The latest treatment methods in refractive surgery using the new CRS-Master

The CRS-Master permits individually optimized excimer laser treatment of defective vision in connection with the excimer laser MEL 80. The integrated diagnostics help the user in the decision-making process, in order to achieve optimal treatment and, at the same time, deliver measurement data from which the CRS-Master creates a complete treatment program for the MEL 80.

Until now, the WASCA Analyzer, a high-end aberrometer for the measurement of wavefront eye defects, was the only diagnostics device component of the CRS-Master. With the product launch of the newest version of the CRS-Master, Version 2.1, the ATLAS 995 corneal topography device by Carl Zeiss Meditec has now also become an integral component of the system. In particular, symptoms caused by irregularities of the cornea can now be addressed in an even more targeted manner, including, particularly, zone enlargements and correction of decentration after refractive surgery, as well as follow-ups after corneal transplants and therapeutic applications. The completely new algorithm also contains an automatic detection of the visual axis, including compensation for the angle kappa.

OcuLign eye registration is another innovation of the new CRS-Master. The newest version of the WASCA Analyzer now also provides reference images of the eye along with the wavefront data. From the diagnosis, through the calculation, all the way to the treatment derived from it, the exact positioning on the eye remains consistent. Before the surgery, the MEL 80 automatically detects anatomical reference points and iris structures of the patient's eye, and precisely directs the treatment to the source of the measurement data. A rotation of the eye and changing pupil size will not affect the results. The OcuLign eye registration offers the user more precision and comfort, as well as safety during the treatment process. It can be used for spherocylindrical and wavefront-guided corrections.

The newest CRS-Master is now visually persuasive as well. The system table was further developed into a compact workstation, into which the diagnostic equipment fits seamlessly, and makes possible an effective and ergonomically optimised patient examination procedure. The user is guided intuitively by the CRS-Master software, which also appears in an attractive new design.

Depending on the field of application and preference of the customer, the CRS-Master is offered in 3 configurations, in addition to a mobile laptop version for treatment planning.

As a result of the combination of topographic and wavefront data, the new CRS-Master now allows for more comprehensive customised treatment variations. The new CRS-Master meets the challenge of offering our customers a "master-ful" product for customised refractive surgery.

