Refractive Surgery with Excimer Laser from InPro

Powerful Excimer Laser source from LAMBDA-Physik, the world leader in Excimer Laser.

Extremely low costs for Excimer gas, maintenance and service.

Full warranty for one year on all components.

Safety standards:

CE and MedGV (EN 60601)
After more than 10 years of research and clinical use we are now in the position to offer the latest generation of Excimer Laser for refractive surgery:

**gaussian beam profile (diameter of 6.8 mm):**
- no iris or moving optics
- smooth transition zone:
- no glare for patients
- reduced ablation:
- eccentric ablation:
- "Steepen Up The Flat Axis" (1992)
- scanning system for aberrations
- Presbyopia only with hyperopia
- Biophysical Customized Ablation
- Cornea-Scope for BCA - calculation

For refractive surgery it is necessary to have a higher fluency of laser energy in the center than in the periphery. This distribution follows the GAUSS law.

The GAUSS distribution of other Excimer Lasers in ophthalmology is produced by beam expanding, driven variable apertures, rotating/erodible masks, rotating/scanning slits, scanning spots and combinations of these techniques.

But InPro has developed a DIFFRACTIVE OPTICAL ELEMENT (D.O.E.) which forms the beam profile of the Excimer Laser into the GAUSS distribution independently from the primary distribution. This „magic plate“ consists of an array of thousands of micro-lenses embedded in a quartz-plate.

The InPro GAUSS profile generated by the D.O.E. is projected by only one single lens on the cornea.

**Eye-tracking devices are not necessary!**

The treatment times are very short, e.g. myopia treatment –6 d in 13 sec. Fixation is not a problem. Tremor of the eye will not affect the results.

The InPro Excimer Laser Profile GAUSS is homogeneous and temporarily constant over the complete lifetime of a gas fill (approximately 10 days).

At any time the system generates the same absolutely smooth GAUSS profile.