

Corneal Cross Linking i-Volution

PXL SAPPHIRE 318



- Self-calibrating and self-adjusting
- Colour Touch Screen
- Variable settings
3 mW – 9 mW – 18 mW
with automatic radiation
time adjustment



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PXL SAPPHIRE 318



The PXL SAPPHIRE 318 is portable with a high quality table mount.

Corneal Cross Linking

Corneal Cross Linking (CXL) is a treatment with the aim of strengthening the corneal stromal tissue through the formation of new chemical bonds between stromal fibres.

- CXL is the only effective non-invasive treatment to stop progressive keratoconus as well as related ectatic disorders (such as PMD and iatrogenic ectasia) and has a regularisation effect on corneal topography.
- In addition to its role in treating ectatic corneal diseases, CXL has an established place in the management of infectious keratitis. UV light has long been known for its ability to kill different microorganisms (such as bacterial and fungal ones). Since keratitis in humans is an important cause of blindness, and antibiotic resistance is an increasing problem worldwide, CXL proves to be an extremely valuable possibility to manage the condition with a satisfactory outcome.
- CXL treatments are inexpensive, easy to perform, and easy for the patient.

Unique – Fast – Excellent

Visionary MedTech for a better performance – Swiss Made

Clinical Experience

In recent years corneal cross-linking has become the standard procedure for treating patients with progressive keratoconus and other ectatic corneal diseases because of its effectiveness and lack of serious side effects. A large number of major clinical studies has proven the effectiveness of CXL and the lack of serious side effects. More than 85 % of eyes treated with CXL showed a significant increase in BCVA. Six months after the procedure cylinder was reduced in the majority of patients.

Background

Corneal Cross Linking is a process of photo polymerization. During this process singlet oxygen is being created with the use of riboflavin as a photo mediator activated by UV-light. Free radicals lead to physical intra- and inter-helical cross links of stromal collagen fibres. This process takes place mainly in the anterior 200 μ to 250 μ of the stroma.

The Device

The PXL SAPPHIRE 318 was designed with a special focus on effectiveness, safety and user friendliness.

- The touch screen allows easy operation of the system and display of all relevant treatment information.

- To offer flexibility, it enables the surgeon to choose between three energy levels:
3 mW – 9 mW – 18 mW.

- This allows the surgeon to choose the ideal energy/time combination for the intended treatment:
Standard – Accelerated – Express:

3 mW \times 1800 sec (30 min) = 5400 mJ

9 mW \times 600 sec (10 min) = 5400 mJ

18 mW \times 300 sec (5 min) = 5400 mJ

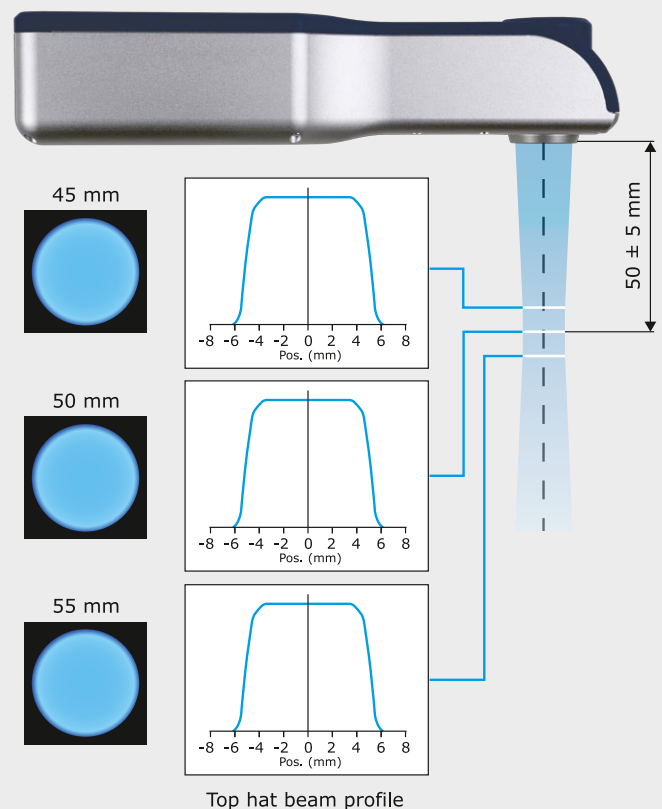
- To guarantee the high level of safety the beam of the PESCHKE SAPPHIRE 318 has a waste line at a distance of 50 mm from the optics and a depth of focus of approx. ± 5 mm.

- To protect the limbal stem cells and to focus the beam on the clear cornea only the PXL SAPPHIRE 318 has a continuously adjustable aperture from 3 mm to 12 mm.

- The PXL SAPPHIRE 318 is portable with a high quality table mount and comes in a sturdy transport case allowing the surgeon to be mobile.

- An optional floor mount is available.

Beam Characteristics



Top hat beam profile

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Safe – Effective – Flexible

PXL SAPPHIRE 318

Technical Data

Wavelength	365 nm
Illumination intensity	3 – 9 – 18 mW/cm ²
Working distance	50 mm ± 5 mm
Light emission	Continuous wave
Aperture	3 – 12 mm Electronically adjusted
Timer	Automatic time adjustment: 30 – 10 – 5 min
Electric power	100 – 240 V 50/60 Hz
Dimensions hard case	37 × 46 × 14 cm
Total weight	7 kg



The PXL SAPPHIRE 318 comes in a sturdy transport case.

Optional Floor Mount.

Your distributor:

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