

INTRODUCING

TECHNOLAS® 317
TENEO MODEL 2

Legal manufacturer:
Technolas Perfect Vision GmbH

1 s/D*



360°

1,740 Hz



- + STATE-OF-THE-ART TECHNOLOGY
- + UNIVERSAL
- + EASE OF USE

= satisfaction²



BAUSCH+LOMB
See better. Live better.



Redefining Excimer Laser Technology

Discover the latest evolution of our excimer laser technology, the TECHNOLAS® TENEO™ 317 Model 2 (M²).

Meticulously designed by our expert German engineering team at Technolas Perfect Vision GmbH, the TENEO™ 317 M² encapsulates:

- + **PERFORMANCE**
- + **EFFICIENCY**
- + **AND EASE OF USE.**

technology

FULL CONTROL
AT YOUR FINGERTIPS

3 steps fortreatment

- 1 Selectpatient
- 2 Chooseandconfirmtreatment
- 3 Treat



INTUITIVE HANDLING ERGONOMIC DESIGN

The INTUITIVE design starts with the Graphic User Interface (GUI).

Taking only **3 steps for** the whole procedure creates a **fast workflow**. Customisation options provide further ease of use.



ERGONOMICALLY DESIGNED FOR PATIENT COMFORT

The TENEOTM 317 M² features a 60° swivelling patient bed.

Ergonomically designed with contours following the natural shape of the spine and a wide mattress to suit all patient sizes, it provides an optimised patient head position during surgery.

The **open feeling** around the laser and the **quiet** performance of the plume evacuator are designed to provide the patient with a reassuring sense of space and calm.



ERGONOMICALLY DESIGNED FOR YOU AND YOUR CLINIC

The TENEOTM 317 M² is one of the smallest lasers on the market¹ (with bed: 2.72 m², without bed: 0.63 m²). Features such as the swivelling microscope, the ergonomic, flexible joystick and the touchscreen control at the monitor all contribute to an enhanced ergonomic experience.

The additional multiple access points for the bed operation and multi-functional options on the GUI all help your team to work efficiently during patient treatment.

2.72 m²
(with bed)

0.63 m²
(without bed)

1. Data on file - based on latest product information at time of printing.



no suction

Precision Engineering for Optimised Performance



The **TRUE TREATMENT TIMES** achieved by an excimer laser are influenced by a number of factors which are all interrelated: laser pulse repetition rate, pulse distribution, laser energy fluence and plume evacuation.



Our engineers have fine-tuned the ratio of these factors to achieve a significant reduction in treatment time, our fastest treatment time yet. The **TENEOTM 317 M² can now treat at 1 s/D.***

We've maintained a **GENTLE** laser treatment delivery approach with our truncated Gaussian, 1 mm low soft spot, smooth ablation profile.

**EASE OF USE +
HIGH-SPEED PERFORMANCE
= EFFICIENT WORKFLOW**



* Based upon calculations using an Optical Zone of 6 mm and a standard myopic treatment (PROSCAN ECO mode).

treatment time



1 s/D*

our
fastest
treatment
time
yet

“
The new TENEOTM 317 Model 2 is extremely fast, with most of our treatments lasting between 3-5 seconds, so that, in my hands, the surgical experience for the patient is very positive.

”
Dr. JORGE CASTANERA,
Instituto Castanera, Barcelona, Spain

“
After more than 20 years of practise in laser refractive surgery, I have never felt more confident in my results than with the new TENEOTM 317 Model 2.

”
Dr. PIERRE LEVY,
Clinique de la Vision, Montpellier, France



3X Control Eyetracker Engineering

A leading multidimensional high-speed eyetracker technology in the ophthalmic industry.

X/Y/Z MOVEMENTS

- + Static cyclotorsion
- + Dynamic rotational tracking
- + Pupil shift compensation

IRIS RECOGNITION

- + Astigmatism
- + K + Q Values
- + HOAs

DIGITAL COAXIAL CAMERA

- + Pupil Centration
- + Pupil Shift
- + Limbus detection



1,740 Hz

“
The TECHNOLAS® TENEO™ 317 Model 2 is an absolute delight to use and a giant leap forward.

Apart from being incredibly quick, it is highly accurate for both hyperopia and myopia with minimal nomogram changes. The software is very easy to use and responsive and the ability to control the mechanics and lighting on the touchscreen reminds me of being in my Tesla !
”

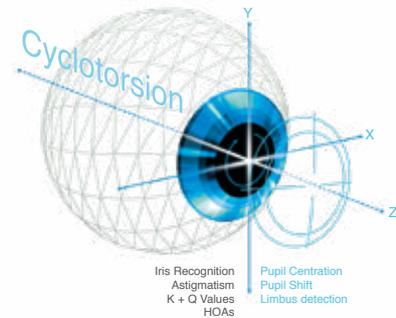
Dr SHERAZ DAYA,
Centre for Sight, UK

INTEGRATED TECHNOLOGY FOR PRECISION....

By continuing to refine the design and capabilities on our excimer laser platform, the eyetracking technology, illumination and visualisation on the TENEO™ 317 M² has been taken to another level.

HIGH SPEED EYETRACKER 1,740 Hz

We have industry leading eyetracker technology. Our eyetracker operates at 1,740 Hz; more than 3 times the speed of the laser's repetition rate. The multidimensional, high-speed eyetracker features contrast optimised IR-Illumination and digital coaxial camera for real-time active z-tracking.



ILLUMINATION & VISUALISATION

The TENEO™ 317 M² features enhanced illumination options and visualisation options on the ring illumination of the plume evacuation unit, the slit lamp and the microscope mirror. This provides an optimised view of the surgical field.

ADVANCED MICROSCOPE TECHNOLOGY

The state-of-the-art 360° microscope features additional functionality combined with its easily adjustable working positions; five magnification settings, as well, as a booster of 50% at all settings [2.5x, 4x, 6.5x, 10x, 16x (± 0.5x)].

Magnification adjustment options can also be made via the GUI.

5 magnification
settings

tracking

Premium procedures for your patients



An advanced range of treatments are available on the TECHNOLAS® TENEO™ 317 M², **accommodating a wide range of indications and patients**. Our three treatment categories enable a straightforward but individualised patient treatment approach.

/PROSCAN* THE VERSATILE PROCEDURE

The PROSCAN procedure is suitable for a wide ranging patient age. The aspheric treatment algorithm has been designed to maintain the preoperative shape of the cornea, and to prevent clinically significant increase of induced spherical aberrations.

/ZYOPTIX HD* THE WAVEFRONT- BASED PERSONALISED PROCEDURE

With over 17 years of experience in wavefront guided algorithms², the ZYOPTIX algorithm is a clinically proven personalised procedure.^{3,4,5} The ZYOPTIX HD treatment provides an advanced treatment of pre-existing Higher Order Aberrations (HOA).

Our wavefront-based personalised procedure is a fully automated, integrated diagnostic treatment.

/SUPRACOR™ THE TRUE VARIFOCAL LASIK PROCEDURE FOR PRESBYOPES

Available since 2011, SUPRACOR™ procedures on TENEO™ systems are now performed in over 32 countries worldwide.

Its unique varifocal treatment has been designed to improve near and intermediate vision, while preserving distance vision.⁶ The procedure can be performed bilaterally.

* ECO Mode available for reduced tissue ablation for myopic eyes with non-aspheric treatment profile.

2. Safety and Effectiveness of the Bausch & Lomb TECHNOLAS 217z Zyoptix System for Personalized Vision Correction - www.accessdata.fda.gov/cdrh_docs/pdf/P990027S006b.pdf.

3. Kanjani N, Jacob S, Agarwal A, *et al.* Wavefront and topography-guided ablation in myopic eyes using Zyoptix. J Cataract Refract Surg 2004;30:398-402.

4. Cosar CB, Saltuk G, Sener AB. Wavefront-guided laser in situ keratomileusis with the Bausch & Lomb Zyoptix system. J Refract Surg. 2004 Jan-Feb;20(1):35-9.

5. Kohnen T, Bühren J, Kühne C, Mirshahi A. Wavefront-guided LASIK with the Zyoptix 3.1 system for the correction of myopia and compound myopic astigmatism with 1-year follow-up: clinical outcome and change in higher order aberrations. Ophthalmology. 2004 Dec;111(12):2175-85.

6. Ang RE, Cruz EM, Pisig AU, *et al.* Safety and effectiveness of the SUPRACOR presbyopic LASIK algorithm on hyperopic patients. Eye and Vision (2016) 3:33.



SUPRACOR™ FOR YOUR PATIENTS

... For Your Practice

A patient centred approach adaptable for your patients' needs.

EXPAND YOUR PRACTICE WITH SUPRACOR™

The SUPRACOR™ procedure meets the growing demand of presbyopic patients looking for improved quality of vision without glasses for most daily activities.

SUPRACOR™ can bring additional patients to your practice who are looking for a LASIK solution to their reduced visual quality.

Suitable for a broad range of hyperopes and myopes, as well as early presbyopes.

no blade
premium treatment

"The availability of SUPRACOR™ myopia expands the age range of patients who benefit from refractive surgery, whilst SUPRACOR™ hyperopia multiplies the number of patients, who are candidates for refractive surgery. SUPRACOR™ provides the possibility to adapt the procedure to fulfil the personal needs of patient's vision."

Dr KIMMO LIESTO,
Mehiläinen Group, Helsinki, Finland

"I have used two protocols for SUPRACOR™; the regular binocular SUPRACOR™ and regular for non-dominant eye and mild SUPRACOR™ for dominant eye. I have found astonishing results with the SUPRACOR™ technique, especially for the patients that need near vision and hyperopic patients over 45 years old."

Dr SUHAIB ALSAMADY,
Ibn Alhaytham Hospital, Amman, Jordan

"I have been using SUPRACOR™ for the past 4 years. Having SUPRACOR as a refractive solution for presbyopes has opened my patient base to the above 40 age group."

Dr ROBERT ANG,
Asian Eye Centre, Philippines

"SUPRACOR™ has been a very additive tool to my practice.

Advantages over the other presbyLASIK procedures are its reversibility, correcting refractive errors in parallel, faster recovery, and low complication rates.

Patient expectation and selection are important, but in my experience, the procedure should be a fast and easy to learn procedure for any refractive surgeon."

Dr ELIAS F. JARADE,
The Dubai Mall Medical, Dubai, UAE

Transepithelial Surface Ablation



IMPROVED WORKFLOW ONE STEP PRK

BAUSCH + LOMB is introducing an optimized workflow for the transepithelial surface ablation procedure. The transEpi PRK procedure allows a one-step procedure to be performed, which increases the ease of use and reduces the treatment time. TransEpi PRK combines PTK for epithelium removal and PRK for the correction of a refractive error using an optimized single procedure with the TECHNOLAS® TENEO™ 317 Model 2.

REDUCING INTERVENTION TIME ALL IN ONE STEP

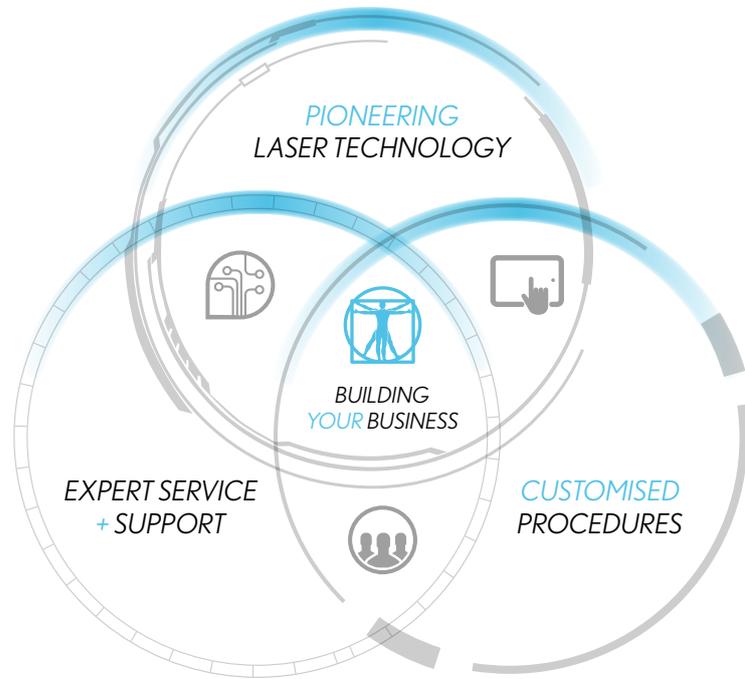
TransEpi PRK saves time between epithelial removal and the refractive treatment, reducing intervention time and provides procedure calculation, iris recognition and centration of ablation profile all in one step.

NO ALCOHOL

This combination, compared with conventional PRK, has been designed to customize the size of the epithelium removal that is required for stromal ablation and also to allow the surgeon to perform surgery without using alcohol.

FINISHING LAYER ASSIST THE ENTIRE EPITHELIUM REMOVAL

This software allows you also to optionally activate a finishing layer at the end of the treatment. This 3rd layer allows adding a PTK treatment of up to 15 microns maximum in depth automatically. It might be used as a reserve in order to assist the entire epithelium removal for cases where the actual epithelium thickness exceeds the programmed value. Surgeons performing finishing layers, with or without masking agent, can finalize their treatment process without loading an additional treatment or license.



BRINGING IT ALL TOGETHER
We Deliver The Full Laser Solution

The Bausch + Lomb team is uniquely positioned to deliver a complete refractive solution for your surgical practice. We have the expertise to provide you and your patients with customised, precise, premium procedures to meet your expectations.

Our service and support has a global reach, through the highly trained network of skilled engineers, service and application specialists.

We also have a dedicated Centre of Excellence at our Munich facility which provides specialised training to surgeons and clinic staff on our femtosecond and excimer lasers and diagnostic platform.

With our expertise, we can help your practice grow by maximising productivity with our refractive platform and streamlined workflow, to work effectively and efficiently whilst providing quality of care.

The Complete Refractive Package

By partnering with Bausch + Lomb, we can provide you with the complete, integrated refractive range for a seamless workflow through our femtosecond laser, excimer laser and instrumentation portfolio.

/VICTUS® FEMTOSECOND LASER PLATFORM

Refined versatility

Our latest generation VICTUS® femtosecond laser is a versatile platform with cataract, therapeutic and LASIK flap indications. The pioneering OCT Technology shows continuous live action footage of all procedures from the docking, to treatment planning and during the procedure.

/STORZ® OPHTHALMIC INSTRUMENTS

Instrumentation Tailor made for refractive

Storz® Ophthalmic Instruments offer a wide range of surgical products, including a full array of microsurgical instruments for cataract, retinal, refractive and corneal surgery.



INVISIBLE LASER RADIATION!
AVOID EYE OR SKIN EXPOSURE
TO DIRECT OR SCATTERED RADIATION

CLASS 4 LASER PRODUCT

Wavelength: 193 nm
 Pulse duration: 5 - 11 ns
 Maximum pulse frequency: 512 Hz
 Maximum output energy: 192 mJ

IEC 60825-1:2014

Contact your Bausch + Lomb representative to learn more about **TECHNOLAS® TENEOLAS™ 317 MODEL 2.**

Design and specifications are subject to change without prior notice as a result of ongoing technical development. The TECHNOLAS® TENEOLAS™ 317 MODEL 2 Excimer Laser is CE Marked. Indications and approvals may vary by country, including Canada. Please contact our regional representative regarding individual availability in your respective market. TECHNOLAS, TENEOLAS are trademarks of Bausch & Lomb Incorporated or its affiliates. © 2019 Bausch + Lomb Incorporated. All rights reserved. EMEA_SU_B_TENEOLAS_19_001 TECHNOLAS Perfect Vision GmbH - A Bausch + Lomb Company. Messerschmittstr. 1+3, Munich, Germany.

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