



**MEL 80 excimer laser**  
High performance meets versatility



We make it visible.



## Just what your clinic is looking for

### **Invest in the latest refractive excimer technology**

The MEL® 80 is a top quality ZEISS product designed to make the correction of vision defects more patient-friendly and individual while providing optimized ablation profiles for quality outcomes. All of the parameters of this modern work platform are oriented towards increasing efficiency, achieving optimum treatment results and rapid recovery of vision. Key features include a high ablation rate and a high-performance eye tracker system.

### **The best outlook for you and your patients**

Added to this are tangible benefits for your daily work such as the overall ergonomic design concept and the economical operation of the system. Reap the advantages of an investment which is forward-looking, practical and profitable.

### **Excimer excellence starts with ZEISS**

Since 1846, the name ZEISS has stood for quality and precision in optics. In 1986, ZEISS unveiled the first excimer laser for refractive correction of the eye. Over the last 25 years the company has been at the forefront of advances in laser vision correction.

## Streamlined procedures And enhanced patient comfort



### It couldn't be simpler to operate

At ZEISS, we strive to make advanced technology applications as simple and ergonomic as possible for our customers. With the MEL® 80, you can take advantage of standardized treatment procedures for optimum results.

The MEL 80 software has been specially developed for this robust and flexible workstation. The graphic user interface is clearly structured and takes you step-by-step through the treatment. A large number of other helpful features facilitate and support your work with the MEL 80: the ergonomically designed workstation, the individually positionable monitor and the integrated video camera.

### Everything's under control!

An active 1 kHz eye tracker with excellent feedback times and an ultra rapid IR camera provides exact positioning during the laser treatment. Thanks to automatic pupil recognition, you can adjust the desired centering point within seconds. This also includes the limbus. If the center of the pupil shifts with relation to the limbus during ablation – through asymmetrical contraction, for instance – the eye tracker compensates for this. In addition, no pupil-dilating medication and related waiting times are necessary prior to this treatment.

### The faster the treatment, the lower the stress

The MEL 80 can significantly reduce the treatment duration for patients. This has the following benefits:

- The stromal bed is only open for a short period, thereby minimizing dehydration and shortening the regeneration process.
- The thermally optimized distribution of the laser firing pattern achieves an ideal balance between ablation speed, tissue heating and pulse energy.
- Patients only need to concentrate on the fixation light for a few seconds.
- Practices benefit from increased efficiency and patient throughput.
- Cone of controlled atmosphere (CCA+) plume removal system ensures consistent atmospheric conditions during treatment.



CCA+ plume removal system



## MEL 80

The excimer laser with a broad performance scope

### The benefits

#### ... for patients

Flying spot laser where the eye tracker's response time is shorter than the time between two consecutive laser pulses

Comfortable treatment, rapid vision recovery

#### ... for eye care specialists

Correction of myopia and hyperopia

Can be combined with VisuMax® femtosecond system

#### ... for workflow

Short start-up time

Swivel-type patient supporting system

#### ... for ease of use

Simple fluence test

Intuitive software

Ergonomically designed workstation

No need for flushing gas systems and extra helium gas cylinders

## Technical data

#### Laser data

Type	ArF excimer laser (laser class IV in accordance with 21 CFR 1040.10)
Wavelength	193 nm
Frequency	250 Hz
Aiming beam diode	650 nm (laser class 1 according IEC 60825-1)

#### Device data

Weight of MEL 80	290 kg incl. gas cylinder
Weight of patient supporting system	232 kg
Dimensions (Laser, W x D x H)	800 x 1550 x 1490 mm
Dimensions including patient supporting system (W x D x H)	1800 x 3140 x 1490 mm
Power supply	100 V AC; 50/60 Hz; 17.5 A 120 V AC; 50/60 Hz; 14.6 A 208, 220, 230, 240 V AC; 50/60 Hz; 7.9 A
Approval	CE mark as per Medical Device Directive 93/42/EEC
Gas supply	Integrated ArF-Premix cylinder 10 l

#### Equipment

Surgical microscope	OPMI® pico with integrated video camera
Active eye tracker	Infrared, pupil and limbus tracking, 1050 frames per second (fps)
CCA+ (plume removal system)	Integrated in device

#### Spot scanning parameters

Beam dimensions	0.7 mm FWHM (Full width at half maximum), Gaussian beam profile
-----------------	---



## MEL 80

The excimer laser with a broad performance scope

### The benefits

#### ... for patients

Flying spot laser where the eye tracker's response time is shorter than the time between two consecutive laser pulses

Comfortable treatment, rapid vision recovery

#### ... for eye care specialists

Correction of myopia and hyperopia

Can be combined with VisuMax® femtosecond system

#### ... for workflow

Short start-up time

Swivel-type patient supporting system

#### ... for ease of use

Simple fluence test

Intuitive software

Ergonomically designed workstation

No need for flushing gas systems and extra helium gas cylinders

## Perfect workflow

With a smart swing

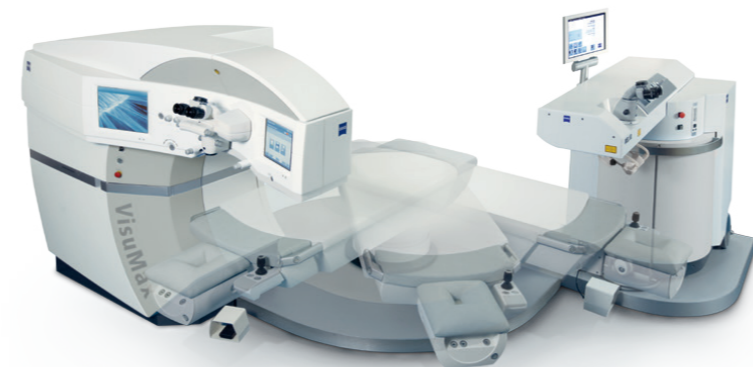
Efficient and individual at the same time! With the MEL® 80 excimer laser and VisuMax® femtosecond system, ZEISS has assembled a seamlessly coordinated systems solution for refractive laser surgery. For everything from precise flap creation to highly accurate refractive corrections, these two top-of-the-line products are designed to ensure convenient workflow, streamlined patient management and excellent treatment results.

#### Equipped to outperform

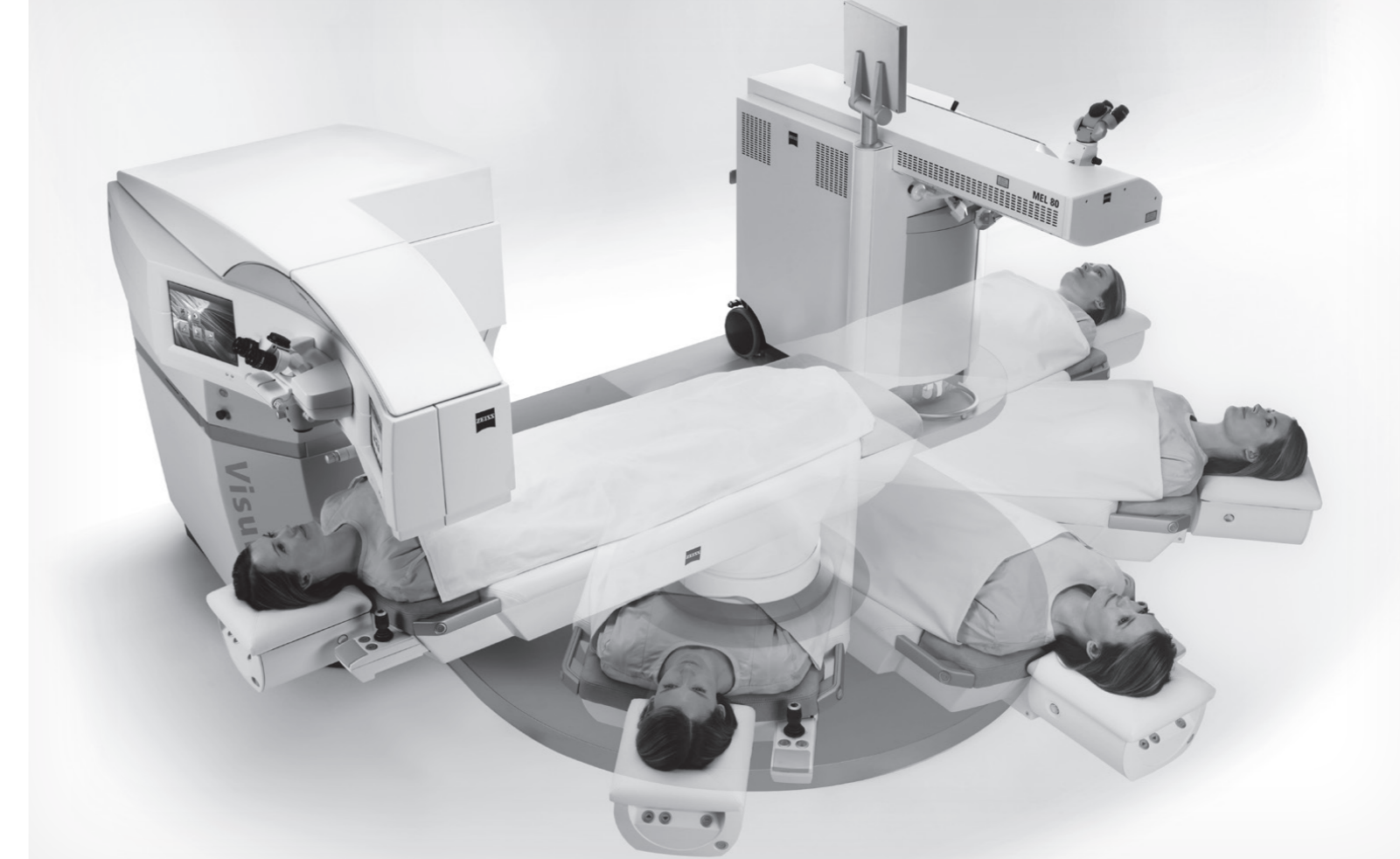
Through the combined use of the pivoting patient supporting system between the VisuMax femtosecond system and the MEL 80 excimer laser the patient experiences the surgery as an integrated process. Unnecessary waiting periods are eliminated and treatment efficiency increased.

#### Systems that communicate with each other

For efficient practice management you benefit from optimally coordinated product portfolio: the MEL 80 excimer laser and VisuMax femtosecond system. We thus offer an integrated solution from a single source – a solution with the potential to subsequently expand your networking capabilities with continuously enhanced data flow efficiency and individualized patient treatments.



VisuMax and MEL 80 combination



#### VisuMax

##### Precision in all facets

The VisuMax femtosecond system allows creation of very accurate and smooth flaps in preparation of Femto-LASIK procedures. With its highly advanced laser technology and innovative optical design, the VisuMax supports maximum cutting precision, efficiency, predictability and patient comfort. Together with the MEL 80, it forms a well-matched duo for a whole range of customized laser treatments.



Contact glass



VisuMax

**Your local contact:**

**Argentina**

Carl Zeiss Argentina S.A.  
Calle Nahuel Huapi 4015 / 25  
C1430 BCO Buenos Aires  
Argentina  
Phone: +54 11 45 45 66 61  
bruzzi@zeiss.com.ar

**Australia**

Carl Zeiss Pty Ltd  
Tenancy Office 4, Level 1  
40-52 Talavera Road  
North Ryde NSW 2113  
Australia  
Phone: +61 2 9020 1333  
med@zeiss.com

**Austria**

Carl Zeiss GmbH  
Laxenburger Str. 2  
1100 Vienna  
Austria  
Phone: +43 1 79 51 80  
austria@zeiss.org

**Belgium**

Carl Zeiss NV-SA  
Ikaroslaan 49  
1930 Zaventem  
Belgium  
Phone: +32 2 719 39 11  
info@zeiss.be

**Brazil**

Carl Zeiss do Brasil Ltda.  
Av. Nações Unidas, 21711  
CEP04795-100 São Paulo  
Brazil  
Phone: +55 11 5693 5521  
medbrasil@zeiss.org

**Canada**

Carl Zeiss Canada Ltd.  
45 Valleybrook Drive  
Toronto, ON M3B 2S6  
Canada  
Phone: +1 800 387 8037  
czcmed@zeiss.com

**China**

Carl Zeiss Shanghai Co. Ltd.  
1/f., Ke Yuan Building  
11 Ri Yin Nan Road  
Waigaoqiao Free Trade Zone  
2005 Yang Gao Bei Road  
Shanghai 200131  
China  
Phone: +86 21 5048 17 17  
sro@zeiss.com.cn

**Czech Republic**

Carl Zeiss spol. s.r.o.  
Radlická 14/3201  
150 00 Prague 5  
Czech Republic  
Phone: +420 233 101 221  
zeiss@zeiss.cz

**France**

Carl Zeiss Meditec France SAS  
60, route de Sartrouville  
78230 Le Pecq  
France  
Phone: +33 1 34 80 21 00  
med@zeiss.fr

**Germany**

Carl Zeiss Meditec VG mbH  
Carl-Zeiss-Strasse 22  
73447 Oberkochen  
Germany  
Phone: +49 7364 20 6000  
vertrieb@meditec.zeiss.com  
Surgical Ophthalmology:  
Phone: +49 800 470 50 30  
iol.order@meditec.zeiss.com

**Hong Kong**

Carl Zeiss Far East Co. Ltd.  
Units 11-12, 25/F  
Tower 2, Ever Gain Plaza  
No. 88 Container Port Road  
Kwai Chung  
Hong Kong  
Phone: +852 2332 0402  
czfe@zeiss.com.hk

**India**

Carl Zeiss India Pvt. Ltd.  
Plot No.3, Jigani Link Road  
Bommasandra Industrial Area  
Bangalore - 560 099  
India  
Phone: +91 80 4343 8000  
info@zeiss.co.in

**Italy**

Carl Zeiss S.p.A.  
Viale delle Industrie 20  
20020 Arese (Milan)  
Italy  
Phone: +39 02 93773 1  
infomed@zeiss.it

**Japan**

Carl Zeiss Meditec Japan Co. Ltd.  
Shinjuku Ku  
Tokyo 160-0003  
22 Honchio-Cho  
Japan  
Ophthalmic instruments:  
Phone: +81 3 33 55 0331  
medsales@zeiss.co.jp  
Surgical instruments:  
Phone: +81 3 33 55 0341  
cmskoho@zeiss.co.jp

**Malaysia**

Carl Zeiss Sdn Bhd.  
Lot2, Jalan 243/51 A  
46100 Petaling Jaya  
Selangor Darul Ehsan  
Malaysia  
Phone: +60 3 7877 50 58  
malaysia@zeiss.com.sg

**Mexico**

Carl Zeiss de México S.A. de C.V.  
Avenida Miguel Angel de Quevedo  
496  
04010 Mexico City  
Mexico  
Phone: +52 55 59 99 0200  
cz-mexico@zeiss.org

**Netherlands**

Carl Zeiss B.V.  
Trapezium 300  
Postbus 310  
3364 DL Sliedrecht  
Netherlands  
Phone: +31 184 43 34 00  
info@zeiss.nl

**New Zealand**

Carl Zeiss (N.Z.) Ltd.  
15B Paramount Drive  
P.O. Box 121 - 1001  
Henderson, Auckland 0650  
New Zealand  
Phone: +64 9 838 5626  
med@zeiss.com

**Poland**

Carl Zeiss sp. z o.o.  
ul. Lopuszanska 32  
02-220 Warsaw  
Poland  
Phone: +48 22 858 2343  
medycyna@zeiss.pl

**Singapore**

Carl Zeiss Ptd. Ltd.  
50 Kaki Bukit Place  
Singapore 415926  
Singapore  
Phone: +65 6741 9600  
info@zeiss.com.sg

**South Africa**

Carl Zeiss (Pty.) Ltd.  
363 Oak Avenue  
Ferndale  
Randburg 2194  
South Africa  
Phone: +27 11 886 9510  
info@zeiss.co.za

**South Korea**

Carl Zeiss Co. Ltd.  
Seoul 121-828  
Mapo-gu  
141-1, Sangsu-dong  
2F, BR Elitel Bldg.  
South Korea  
Phone: +82 2 3140 2600  
korea@zeiss.co.kr

**Spain**

Carl Zeiss Meditec Iberia S.A.U.  
Ronda de Poniente, 15  
Tres Cantos  
28760 Madrid  
Spain  
Phone: +34 91 203 37 00  
info@zeiss.es

**Sweden**

Carl Zeiss AB  
Tegeludsvaegen 76  
10254 Stockholm  
Sweden  
Phone: +46 84 59 25 00  
info@zeiss.se

**Switzerland**

Carl Zeiss AG  
Feldbachstrasse 81  
8714 Feldbach  
Switzerland  
Phone: +41 55 254 7534  
info@zeiss.ch

**Thailand**

Carl Zeiss Thailand  
90 CyberWorld Tower A,  
36<sup>th</sup> Floor, Unit A 3601  
230 Ratchadapisek Road  
Huaykhwang, Bangkok 10310  
Thailand  
Phone: +66 2 248 8787  
thailand@zeiss.com.sg

**United Kingdom**

Carl Zeiss Ltd.  
509 Coldhams lane  
Cambridge  
CAMBS  
CB1 3JS,  
United Kingdom  
Phone: +44 1707 871200  
info@zeiss.co.uk

**United States of America**

Carl Zeiss Meditec, Inc.  
5160 Hacienda Drive  
Dublin, CA 94568  
USA  
Phone: +1 925 557 4100  
info@meditec.zeiss.com

Publication No: 00000-2031-104 MEL4711 CZ-X/2012  
The contents of the brochure may differ from the current status of approval of the product in your country. Please contact our regional representative for more information.  
Subject to change in design and scope of delivery and as a result of ongoing technical development.  
MEL and VisuMax are registered trademarks of Carl Zeiss Meditec AG. Printed on elemental chlorine-free bleached paper.  
© 2012 by Carl Zeiss Meditec AG. All copyrights reserved.

