

mectron



→ MECTRON STARLIGHT SLER®

sler® TECHNOLOGY

less shrinkage, stronger filling

→ sler® stands for „soft light energy release“, a slow decrease of light intensity at the end of the cycle. This patented mectron technology modulates and controls the temperature and shrinkage of the composite, improving its mechanical properties.

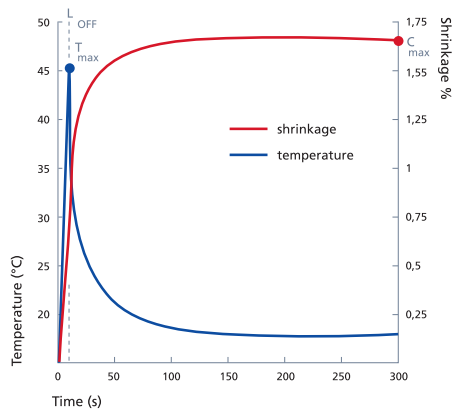


→ DESIGN

Made of stainless steel, the starlight sler® body stands for excellent ergonomics and high build quality.

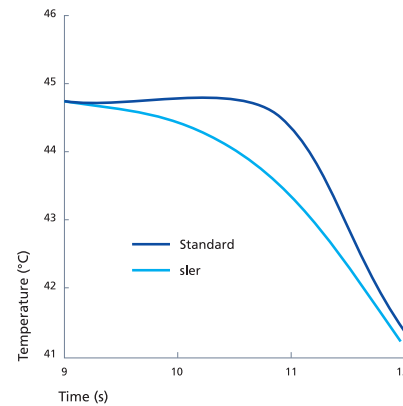


COMPOSITE TEMPERATURE AND SHRINKAGE RELATION



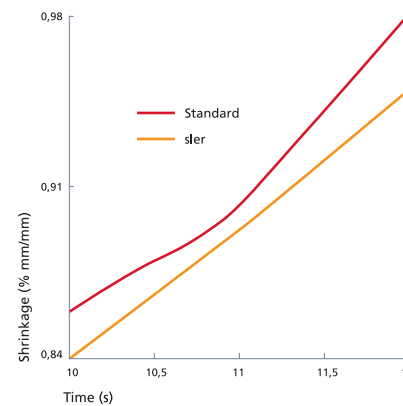
Standard program per 10 sec

IN-VITRO COMPOSITE TEMPERATURE



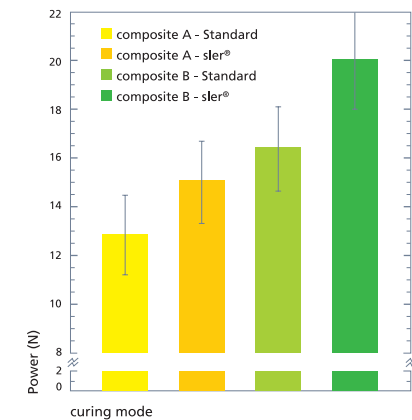
Comparison of Standard mode (10 sec) and sler mode (9 sec max power and 2 sec constant decrease)

IN-VITRO COMPOSITE SHRINKAGE



Comparison of Standard mode (10 sec) and sler mode (9 sec max power and 2 sec constant decrease)

MECHANICAL STRENGTH



Comparison of different materials (color A2)

STANDARD EFFECTS

Temperature and shrinkage exhibit an inverse relation. Interrupting light exposure stops the energy supply but the curing process is ongoing.

TEMPERATURE CONTROL

Compared to a standard curing cycle, the sler® technology shows a better thermal control of the curing process. This protects against interface debonding, which may lead to marginal leakage.

SHRINKAGE CONTROL

The sler® technology allows the dental material to relax its shrinkage stress at the end of the curing cycle. This decreases the possibility of micro-fractures both in the composite material and in the dentine substrate.

MECHANICAL STRENGTH INCREASE

Composite materials cured with sler® technology show improved mechanical strength, which contributes to better clinical performances.



LED TECHNIQUE

from the inventor

→ mectron invented and presented in 2001 the world first LED curing lights. Today mectron is one of the world largest manufacturers of LED curing lights. Thanks to our on-going research activity and the development of the starlight sler®, we now offer one of the most innovative and efficient devices available.



→ CURING POWER

- more than 1.400 mW/cm²
- transparent fiber optics allow 12% more power than black fiber optics
- effective on camphoroquinone, used as photoinitiator in 98% of the materials on the market
- wavelength comprised between 440 nm and 480 nm with a peak at 460 nm
- hardens a 2 mm layer in 10 sec
- charging station with integrated radiometer

→ BATTERY POWER

- lithium-ion battery with no memory effect, which can be easily disassembled even in the dental office
- charging time last only 90 minutes
- capacity sufficient for 320 10-second cycles
- processor controlled constant light power regardless of the charge level
- low battery warning

→ ERGONOMICS

- only two control-buttons
- no fan – silent working
- black or transparent fiber optics available
- 360° rotatable fiber optics with metal connection
- well balanced, compact housing
- only 190 g weight
- control LEDs indicating the chosen mode
- sterilizable, easy to apply optical protection

→ RELIABILITY

- 3 years warranty
- LED average working life of 2.5 million 10-second cycles

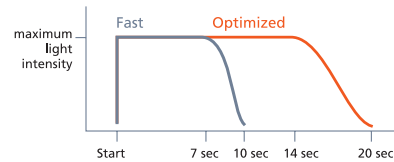
→ HYGIENE

- smooth, continuous and compact surface enables perfect disinfection
- sterilizable fiber optics

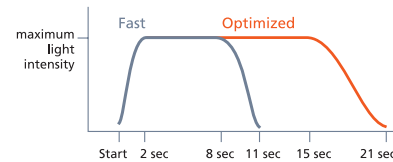


→ OPERATING MODES

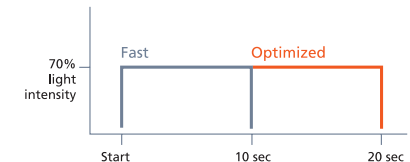
The operating modes are selected by pressing the „mode“ button. Depending on how long the „start“ button will be pressed for, either the short or the long cycle starts. The chosen mode is indicated by LED.



SLER MODE



SLER+ MODE



SOFT MODE



→ STARLIGHT S SLER

LED curing integrated in the dental unit

→ The starlight s sler® can be easily built into a dental unit – the ergonomic handpiece can be positioned simply in the quiver (its holder). The starlight s sler® offers the same 6 curing modes of the starlight sler®.



→ FLEXIBILITY

All the high tech electronics of starlight sler® integrated in just its handpiece. Easy installation on your dental unit: only power supply and control are needed.

→ TECHNICAL SPECIFICATIONS



→ STARLIGHT SLER

→ STARLIGHT S SLER

→ Size (width x Ø)	205 x 25 mm	141 x 25 mm
→ Weight	190 g	122 g
→ Wavelength	440–480 nm	440–480 nm
→ Light intensity		
– Ø 8 mm mm optical fiber	> 1400 mW/cm ²	> 1400 mW/cm ²
→ LED average working life	2.500 000 10-second cycles	2.500 000 10-second cycles
→ Battery charging time	90 minutes	
→ Battery capacity	320 10-second cycles	
→ Warranty (excluding the optical fiber)	3 years (including the battery)	3 years



MECTRON STARLIGHT SLER®
EVEN IN SLOWING DOWN
WE ARE THE FASTEST -- THE SLER®
TECHNOLOGY BY MECTRON

www.mectron.com or mectron@mectron.com

mectron s.p.a., via Loreto 15/A, 16042 Carasco (Ge), ITALIA, tel +39 0185 35361, fax +39 0185 351374



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medical technology