

SurgiTel[®]

1-800-959-0153 SURGITEL.COM



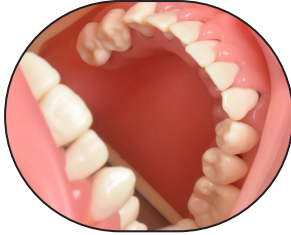
vision
& ergonomics
at work

VISION

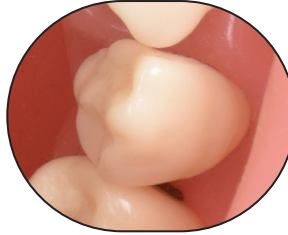
No Magnification



2.5x Magnification



10.0x Magnification



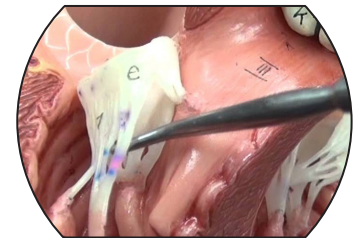
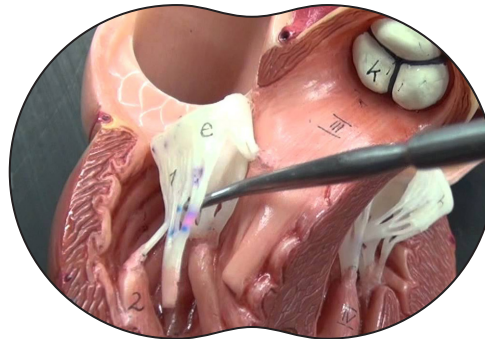
MAGNIFICATION

SurgiTel offers magnification from 2.5x to 10.0x (2.5x, 3.0x, 3.5x, 4.5x, 5.5x, 6.5x, 8.0x, 10.0x). Not every clinician may need 10.0x magnification, but every clinician will find a fit among SurgiTel's many options.

FIELD OF VIEW

SurgiTel loupes maximize your field of view by utilizing both oculars for a binocular effect. A wider field makes for easier and faster work, and better outcomes.

Pictured: The same scene, equally magnified, oval shape, binocular view with circular lenses vs. overlapped view with truncated lenses.



Range in Focus

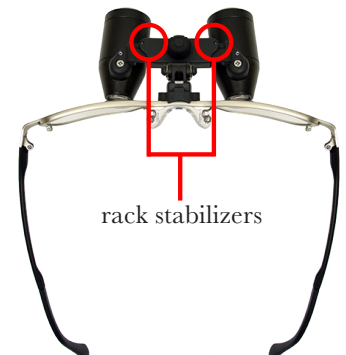
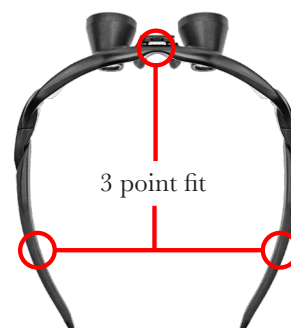
DEPTH OF FIELD

SurgiTel maximizes your depth of field using ocular positioning and other proprietary technology. A longer depth of field makes for easier and faster work, and better outcomes.

ALIGNMENT & STABILITY

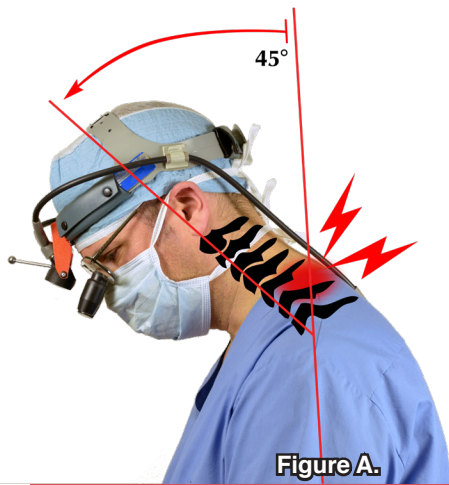
Visual quality relies on a secure and stable mounting. SurgiTel delivers the clearest vision through quality optical components and construction, and patented stabilization technology.

- 3 point fit makes loupes feel lighter, improving weight distribution by moving the weight to the back of the head.
- Rack stabilizers maintain optical alignments accurately.



ERGONOMICS

WHICH CLINICIAN ARE YOU?



Up to 92.3% of clinicians report having working pain. Of those, the majority complained of cervical spine pain, musculoskeletal fatigue, and vertebral disc injury. Injuries like these often become chronic, and eventually require surgical intervention.¹

Don't put your career at risk by working with loupes that force an unhealthy head tilt (Figure A.).

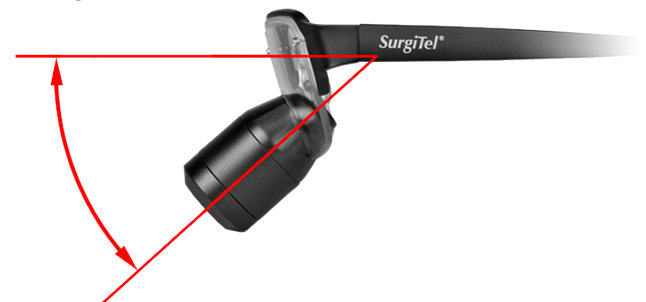
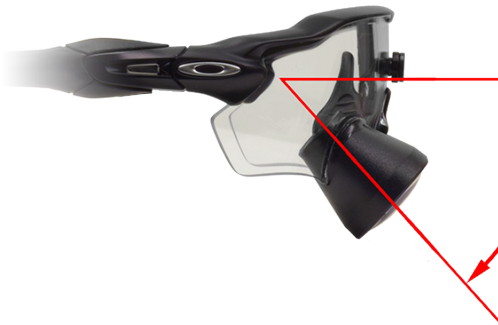
SurgiTel loupes allow you to maintain a neutral and healthy head tilt (Figure B.) for a long and pain-free career.

1. Chitnis, Deepak. "Operating with Pain: Surgeon Workplace Injury Underrecognized." ACS Surgery News 12.4 (2016): 1+. Print.

TRADITIONAL LOUPES

SurgiTel®

STEEP DECLINATION ANGLE



INDUSTRY PERSPECTIVES



"I feel that SurgiTel is way ahead of the game compared to their competitors in ergonomic features. The features are much better than other brands in overall comfort."

—*Darryl Hatchett, DDS*



"SurgiTel loupes and headlights have made my teachings successful. [SurgiTel loupes] encourage... [and] require an appropriate posture. I have learned a lot about ergonomics since... and have come to realize how important this is for all surgeons."

—*Avery Bennett, DVM, MS, DIPLOMATE ACVS*



"The SurgiTel loupes have essentially eliminated all of the neck and back pain that I have previously endured while performing surgery."

—*Raymond Singer, MD, MMM, CPE, FACS, FACC, FCCP*



"The SurgiTel front-lens-mounted, loupes are one of the few loupes on the market today that offers [the] adjustability to allow the operator to maintain a safe head posture."

—*Bethany Valachi, PT, MS, CEAS*



"As a taller guy, I used to get neck pain with my old loupes, but that has completely resolved with the steep decline angle offered by SurgiTel... Would recommend these loupes [and headlight] to all surgeons."

—*Petar Bajic, MD*



"Shortly after school and residency training, I started getting neck pain and headaches... One of my colleagues said that it might be the loupes I'm using... I contacted [SurgiTel] and my life has never been the same!"

—*Katherine Staniek, DDS*

LOUPES

THROUGH-THE-LENS (TTL)

- Custom built to your specifications
- Pantoscopic tilted frames for a better ergonomic angle and wider field-of-view



MICRO LINE

- Miniaturized oculars for lightest weight
- Available for both Galilean and Prism oculars



FRONT-LENS-MOUNTED (FLM)

- Vertical Slide for optimal eye alignment
- Loupe stabilization technology for clearest vision



COMPACT LINE

- Most versatile oculars with widest field
- Available for both Galilean and Prism oculars



CLINICIANS REPORT* HAS REVIEWED...

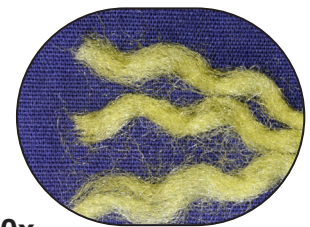
Clinicians Report® was founded in 1976 to provide practitioners with reliable reviews of products to help professionals make educated product purchases. Each year, they test more than 750 product brands. Here's what they have to say about the importance of ergonomic loupes!



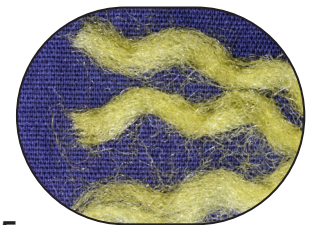
- “Loupes can immediately improve posture, if proper measurements are selected.”
- “Greater declination angles reduce head tilt, improve neck posture and reduce muscle / ligament strain.”
- “Some modern frames (pictured: Ergo Max by SurgiTel) offer improved declination angles (notice the slant of both lenses and frame, allowing the optics to decline more).”



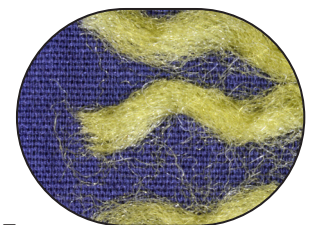
2.5x



3.0x

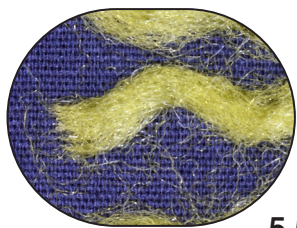


3.5x

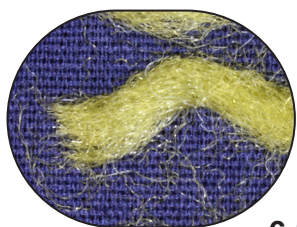


4.5x

MAGNIFICATION



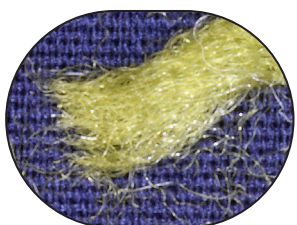
5.5x



6.5x



8.0x

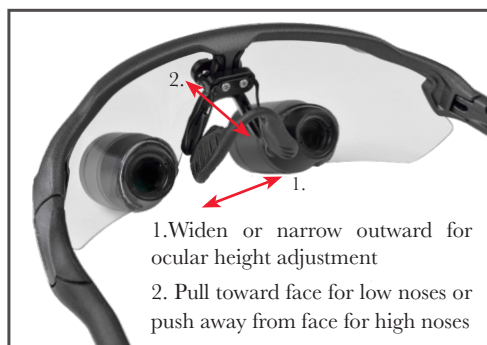


10.0x



PRISM PRO LINE (5.5x - 10.0x)

- Professional level magnification - detailed work is faster and easier
- See important details you would have missed otherwise
- Only SurgiTel offers such high magnification in both TTL and FLM options
- Recommended TTL frames: Aero 3.0, Ergo Max 2.0



CUSTOM ERGO FIT NOSE PADS

- Easy custom fitting for various nose types helps users wear loupes comfortably. - African, Asian, European, Latin, etc.
- Prevents fogging
- Eliminates eyelash touching lens
- Drop-In Rx compatible



“My current set of loupes, SurgiTel Prism Pro 5.5x, have fulfilled [my] need[s] wonderfully. When coupled with SurgiTel’s LED Headlight, the road is paved to timely diagnosis, decisive treatment and meaningful productivity.”

—*Martin Goldstein,*
DMD, FAGD



“Implementing high power (4.5x to 10.0x) lighted loupes will improve your practice daily. SurgiTel Prism Pro loupes will be your new magnification standard.”

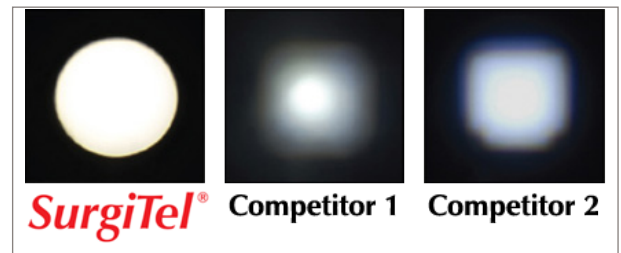
—*George Grayson,*
BSC, MSC, DDS

CLINICAL LIGHTING



BEAM QUALITY

SurgiTel's patented optics create a unique achromatic beam which creates a clear, even circle of light with no hot spots or fading edges. Hot spots induce glare and faded edges reduce clarity. SurgiTel's LED illuminates your target evenly and is comfortable to the eye.



TRUE COLOR (COLOR ACCURACY)

SurgiTel lights have several custom calibrated color formulations. Our neutral light is optimized for color accuracy and eye safety. Your target will appear as if under clear sunlight - instead of an artificial source. These models are ideal for cosmetic procedures and color matching.



BLUE LIGHT HAZARD

Clinicians Report* awarded a **CR Choice Rating** to SurgiTel's Micro LED, a "Small bright LED headlamp with **lowest blue peak**, best color accuracy, light weight, no glare in patients' eyes and overall excellent grade."

*An independent, non-profit, dental education and testing foundation, Clinicians Report®, August 2016. For the full report go to www.SurgiTel.com/CR

Gordon J. Christensen *Reprint*
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Is Your LED Headlamp Damaging Your Eyes?

Gordon's Clinical Bottom Line: Small LED headlamps fitted to magnifying loupes have had greater acceptance by clinicians because of their light weight, ease of use, and bright illumination. However, there have been allegations that the blue-light spectrum present in white LED light can be damaging to eyes. CR scientists and clinicians have reviewed the topic thoroughly and found that most popular LED headlamps on the market and under investigation.

In recent years, dentists and dental hygienists have enthusiastically accepted use of miniature white LED headlamps (see survey on page 2). They have lower energy consumption, longer lifetime, smaller size, and are more robust than older light sources (see CR Report April 2012 for details). However, current white LEDs have significant output in the blue wavelength—a potential hazard. A growing body of evidence indicates that blue light can be a contributing factor to macular degeneration. Research considerations are:

- Headlamps are well proven to increase visibility
- Many clinicians use headlamps more than five hours per practice day
- Evidence seems to use headlamps too bright, causing eye strain
- Evidence seems that blue light in LED headlamps is dangerous
- Amount of blue light varies among headlamp brands
- Is there really a problem or not?

CR scientists, light expert consultants, CR Evaluators, and survey data provide research information on currently popular headlamps and guidelines for the safe use of these extremely valuable operating lights.

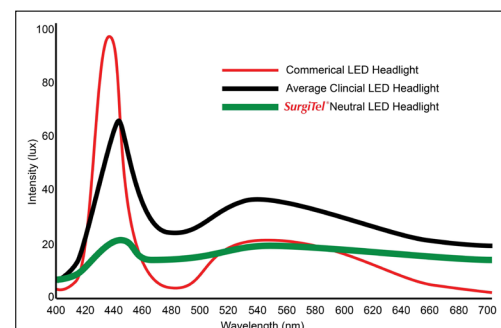
CR Survey Data on Headlamp Use: (n=1,200)

1. What brand of headlamp are you currently using? 10% Feather Light (BlueLight Optics), 16% LED Light (Dentpro for Vision), 11% Zoom LED Benchtop (Chromagen), 7% Zoom Aquatic (Chromagen), 7% Zoom Endoscopy (Chromagen), 6% LED Benchtop (Dentpro for Vision), 5% Zoom Plus (Chromagen), 30% unspecified.
2. How many hours per clinical day do you use your LED headlamp? 53% more than 5 hours, 25% 4-5 hours, 15% 3-3.5 hours, 7% 1 hour or less.
3. On what percentage do you use the light? 53% High, 34% moderate, 9% low.
4. Does headlamp replace use of overhead light? 64% No, 30% Yes.
5. Have you noted any change in vision since using your LED headlamp? 47% No, 53% Yes.



"I commend SurgiTel for recognizing the potential retinal hazard from using LEDs. They have also taken steps to reduce the most dangerous blue light emission from headlamps."

—Richard Price,
 BDS, DDS, MS, FDS,
 RCS, FRCD, PhD



ODYSSEY LED

- Adjustable brightness
- Micro option: lightest loupe-mounted LED
- Mini option: lightweight, brightest loupe-mounted LED
- Attachable to all major brand loupes



Micro LED



Mini LED



WIRELESS LED

- Self-contained / portable
- Longer charge life than Wireless Air
- Adjustable brightness
- Micro and Mini optics options available
- Attaches to all major brand loupes



WIRELESS AIR LED

- Self-contained / portable
- Lighter than Wireless
- Fixed brightness
- Micro and Mini optics options available
- Attaches to all major brand loupes

SURGICAL LED

- Adjustable brightness
- Max brightness: over 100,000 lux
- Headband-mounted and loupe-mounted options available



TTL Loupe-mounted

Headband-mounted

*FLM version available

ECLIPSE TOUCH-FREE LED

(Turn on/off with a hand movement)

- Avoid the risk of cross-contamination
- Adjustable brightness
- Attachable to other major loupe brands
- Micro and Mini optics options available



Touch-Free Active IR sold and manufactured pursuant to a license from Designs for Vision, Inc., Patent No. US RE46,463 E.

FRAME OPTIONS

SurgiTel®

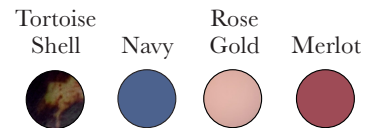
CUSTOM MADE FOR LOUPE PERFORMANCE

SurgiTel frames are custom made for loupes. They are built with the versatility, strength, and ergonomic features required for the most precise and best performing loupes.

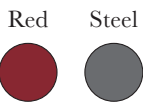
- Built in laser and x-ray filters available on some models
- Built in eye prescriptions
- Mounts the highest magnification levels



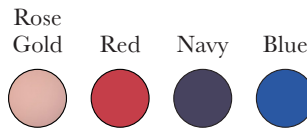
CON2OUR



CON2OUR XS



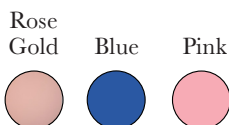
AERO 2.0



AERO 3.0



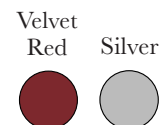
ERGO MAX



ERGO MAX 2.0



COMFORTFLEX





SurgiTel has chosen to work with Oakley frames because of their unique suitability for loupes.

- Extremely lightweight and sturdy
- 3-point fit for best weight distribution
- Steep pantoscopic tilt for enhanced ergonomic angles
- Brand favored by both athletes & U.S. Military



RADAR EV

Black White



RADAR EV XS

Polished White/ White/
White Green Navy



FLAK 2.0

Black Grey
Smoke



HALF JACKET 2.0

Black



SURGITEL/SUNDOG

SurgiTel has chosen to work with Sundog because of their longevity and innovation.

- Superior eye comfort
- Non-slip performance
- Positioned lens vent to minimize fog and moisture
- Durability and flexibility



DRAW

Black



PRIME EX

Black White Blue Pink Ruby



SEATING



SurgiTel's loupes work together with ergonomic chairs and stools to support correct posture. This combination is required to fully prevent pain and injury to the neck and back. With multiple adjustments for seat, arm and back these chairs are designed to fit both you and your work.

RGP Brand Seating: As SurgiTel is the expert on loupes and lights, RGP is the expert on ergonomic stools and chairs. In order to give you the Total Ergonomic Package, SurgiTel has partnered with RGP to provide more solutions for your practice with one visit.

SURGI-CAM HD



Record and review your procedures with SurgiTel's loupe-mounted, high-definition digital video camera.

USE SURGI-CAM FOR

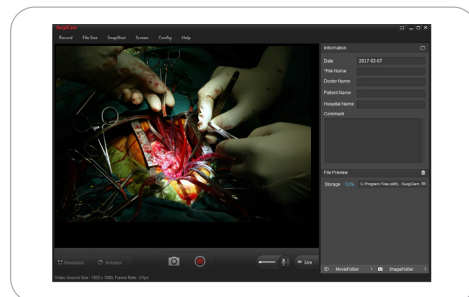
- **Training:** either live or recorded, viewers get a direct view of your work
- **Sharing:** share video locally or over the Internet
- **Publication:** unique and new procedures can be shared with outside parties
- **Documentation:** keep an indisputable record of entire procedures
- **Transmitting:** transmit live procedures anywhere in the world
- **Consultation:** coordinate, live or remote consultation



Advanced miniaturization makes unit lighter than four quarters



USB plug & play



Recording Software Included

EYE PROTECTION



LASER FILTERS

- Filters out dangerous laser wavelength ranges
- SurgiTel's custom tilt angle provides protection without goggles



X-RAY PROTECTION GLASSES

- Protects the eyes from x-ray radiation which can cause early cataract development
- SurgiTel's custom tilt angle provides protection without goggles

LOUPE & LIGHT ACCESSORY PRODUCTS



KEPLERIAN WORKING DISTANCE CAPS

- Work at different distances
- See greater details at reduced distances
- Low maintenance - compensate for reading Rx change effect



GALILEAN WORKING DISTANCE CAPS

- Work at different distances
- See greater details at reduced distances
- Low maintenance - compensate for reading Rx change effect



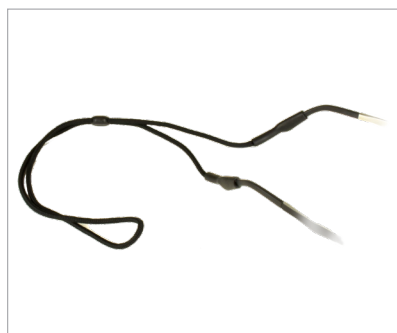
RIMLESS DROP-IN EYE PRESCRIPTION

- Removable eye prescription lenses for TTL Loupes.



LED FILTER

- Replacement curing filter for LED headlights.



RETAINER STRAP

- Maintain a secure fit, plan on replacing your strap every few years.

LOUPE REFURBISHMENT

When your loupes keep working, you keep working! The best way to make sure your loupes continue to provide the best vision is to start a refurbishing schedule. As the manufacturers, we can easily recognize what might go wrong soon and fix issues even before they happen! To keep loupes in "tip-top" shape, we recommend that you schedule a loupe refurbishment once a year.

Contact us at 1-800-959-0153 now to schedule your refurbishment.

VISION & ERGONOMICS

Our Mission: To enhance our clients' work and lives by supporting their best working posture, alleviating compounding neck and back strains, and helping them give patients the best care.



ABOUT SURGITEL

SurgiTel is a division of General Scientific Corporation (GSC), which has been making a variety of optical components and equipment since 1932. In 1992 GSC entered the medical market, developing a line of ergonomic loupes based on multiple patented concepts which help clinicians alleviate their neck and back pain. GSC is located in Ann Arbor, Michigan.

U.S. PATENT NUMBERS US 7,791,798; US 8,913,318; US D649,571; US 8,964,292; US 9,465,235; US D746,354; US 9,383,077; US 7,719,765, US 9,494,299, US 8,068,169, ETC. TOUCH-FREE ACTIVE IR SOLD AND MANUFACTURED PURSUANT TO A LICENSE FROM DESIGNS FOR VISION, INC., PATENT No. US RE46,463E. THE ECLIPSE LED LIGHT USES AN ACTIVE IR. ITS SENSING ELECTRONICS WERE DESIGNED USING A SURGITEL PATENTED DESIGN CONCEPT (US 10,066,816 B2), AND THE BEAM-FORMING OPTICS USE PATENTED OPTICAL TECHNOLOGIES (US 9,383,077 B2; US 9,494,299 B2).

GENERAL SCIENTIFIC CORPORATION 77 Enterprise Drive, Ann Arbor, MI 48103