SurgiTel®

Vision and Ergonomics at Work

ONE SOURCE FOR ALL LOUPE OPTIONS

Through-The-Lens (TTL)

Front-Lens-Mounted (FLM)

ErgoDeflection™ TTL/FLM

Headband Mounted

"SurgiTel® was founded to help clinicians (surgeons, dentists, hygienists, and veterinarians) practice without posture-related pain. I am most proud that we have helped many clinicians be able to take care of their patients without pain in their neck, back, and upper shoulders which they had for many years prior to using SurgiTel ergonomic loupes. Many clinicians have told me that SurgiTel ergonomic loupes saved their careers."

— Dr. B. Jin Chang, Founder and Chief Scientist

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Company Video

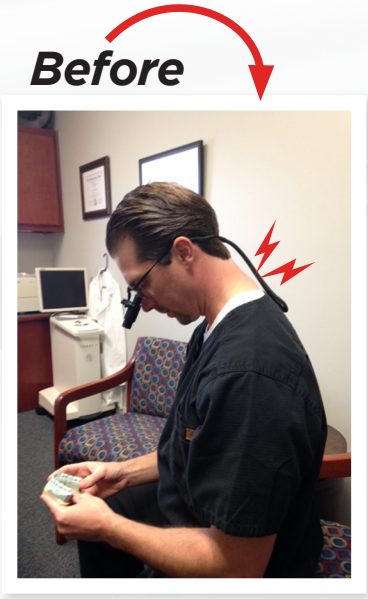
TAKE THE STEPS TO PRACTICE PAIN-FREE

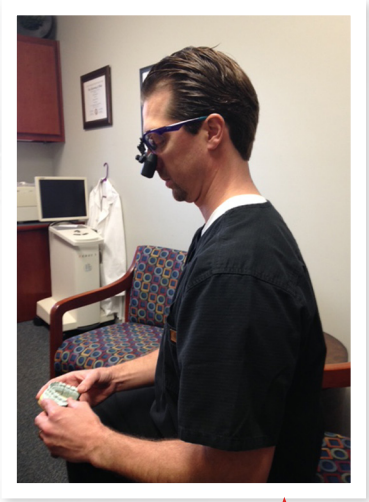
Practicing dentistry can take a toll on your body and even your eyes. If you're not considering ergonomics when you purchase products, such as loupes, you may wind up experiencing back, neck, and shoulder pain that only worsens over time. While headlights have become an essential tool for clinicians, the cool LEDs providing that bright illumination aren't doing your eyes any favors, exposing you to blue light that could eventually damage your vision.

SurgiTel loupes and headlights are designed to help you work safely and comfortably, protecting your body and eye health so you can have a long, happy career.

The SurgiTel® Advantage

SurgiTel was founded on the desire to help clinicians practice comfortably and safely. Not only do we offer products backed by science and research, we are committed to educating clinical professionals about how to practice pain-free through free evaluative services.





Schedule A Free Evaluation

> *"I regret going almost 10 years like I did. Unfortunately, those 10 years did some irreparable damage to my skeletal system, however my neck pain immediately went away and I would say I have a 98% improvement."*
> *— Dr. Brian Lord, DDS*

DESIGN AND BUILD THE ULTIMATE LOUPES

Our goal as a company is to design, engineer, and build the ultimate loupes.

Basic requirements include:

Vision

- Minimum magnification requirement
- Wide field of view
- Custom working distances for each procedure
- Precision alignment

Ergonomics

- Safe head tilt angle (neck posture)
- Ergonomic declination of eyes
- Custom nose pads

Other

- Working distance changes
- Low maintenance costs
- Short learning time
- Highest grade optical glass and materials
- Multi-layer anti-reflective coatings

Scan to Learn More About Loupes

TTL (THROUGH-THE-LENS) HYBRID ERGO™ LOUPES

Experience the advantages of a direct vision TTL with the ergonomics of a deflection loupe. SurgiTel ergonomic TTL Hybrid Ergo™ loupes are custom built to your personalized specifications. The main advantage of TTL loupes is that they don't need to be adjusted. And since the oculars go through the lens, they sit closer to your eyes to provide a wider field of view from a keyhole effect.

Learn More

1 Pantoscopic Tilt

Pantoscopic tilt of frame and/or lenses help give the oculars a steeper declination angle and can eliminate gaps between the face and the bottom edge of the lenses to give better eye protection.

2 Patented Suspended Technology

SurgiTel's patented suspended mounting technology allows for a steeper declination angle while keeping the magnified object in a coaxial alignment with your peripheral line of sight.

3 Ergo Fit Nose Pads

SurgiTel's patented Ergo Fit Nose Pad system easily conforms to satisfy various nose shapes and were also developed to support loupe weight and create optimal space between oculars and eyes.

4 Working Distance Caps

Only SurgiTel offers patented working distance caps that help you save on long term maintenance costs and downtime from needing Rx changes. Working distance caps come with all prism loupes.

SurgiTel®

FLM (FRONT-LENS-MOUNTED) LOUPES

SurgiTel FLM loupes were developed to be sturdy yet lightweight with various adjustment points to give you optimal alignment and ergonomics. The rack arms are able to hold both Galilean and prism ocular magnifications up to 10.5x. An added benefit, FLM loupe maintenance costs is low, frame Rx carrier lenses can be done at your local optical shop, and repairs or replacement parts can be done quickly.

3 Vertical Slide

Vertically align the ocular to eyes to achieve the best images.

4 Prism Oculars

Taking the advances of previous generation prism loupes and concentrating them into a patented optimal compact design and lighter weight ocular, these loupes provide a wider field of view and longer depth of field.

1 Rack Arm Assembly

Patented rack arm assembly includes locking screw, ocular mounting arm and dip-divergence adjustment screws.

2 P.D. (Pupillary Distance) Adjustment Knob

Easily adjust the pupillary distance to change the convergence point.

5 Working Distance Caps

Only SurgiTel offers patented working distance caps that help you save on long term maintenance costs and downtime from needing Rx changes. Working distance caps come with all prism loupes.

Scan to Watch Video

"All surgeons eventually develop neck and back pain. While not 100% is due to the loupes, the fact is that 100% is due to the long hours, stress, and posture. To the extent that the SurgiTel loupes correct so many issues (weight, posture, lighting), the proper loupes setup can make a huge difference to the majority of surgeons. In my case, it took away 90% of my back issues and allowed me to have a long career, performing over 200 heart procedures per year..."

— Dr. Raymond Singer, MD, MMM, CPE, FACS, FACC, FCCP

SurgiTel®

NEXT-GENERATION ERGODEFLECTION™ LOUPES

1 Patent Pending Deflection Prism

The deflection angle of SurgiTel's patent pending ErgoDeflection™ loupes are designed to give you a more tailored viewing angle for optimal neck posture and reach distance. Note that deflection loupes should not cause you to lean back in a non ergonomic posture.

2 TTL and FLM Mounting

The ErgoDeflection loupe is available in two mounting options, Through-the-Lens (TTL) and Front-Lens-Mounted (FLM).

FLM
(Front-Lens-Mounted)

3 Pantoscopic Tilt and Direct Vision

Ergonomic pantoscopic tilt of the frame and lenses help eliminate gaps between the face and bottom edge of the lenses to give better eye protection. It also gives you a wide area of direct viewing to your work area.

4 Working Distance Caps

SurgiTel's patented interchangeable working distance caps can help you adjust the working distance precisely and also allow you to easily update your reading Rx.

5 Magnification Selection

Deflection loupes will increase your working distance. It is recommended to move up one step in magnification power to give you the same visual size projected on your retina as your straight Galilean or Prismatic loupes.

Learn More

LOUPE OPTIONS

2.5x (MICRO)

3.0x (MICRO)

2.5x

3.0x

Galilean

2.5x MICRO
Field Size: 12.0cm
Field Depth: 32.0cm

3.0x MICRO
Field Size: 10.5cm
Field Depth: 18.0cm

2.5x
Field Size: 13.2cm
Field Depth: 20.0cm

3.0x
Field Size: 9.9cm
Field Depth: 15.0cm

3.5x

4.5x

5.5x

6.5x

8.5x*

10.5x*

ErgoDeflection™

3.5x
Field Size: 8.0cm
Field Depth: 12.0cm

4.5x
Field Size: 6.5cm
Field Depth: 7.8cm

5.5x
Field Size: 5.0cm
Field Depth: 5.3cm

6.5x
Field Size: 4.0cm
Field Depth: 4.4cm

8.5x*
Field Size: 3.5cm
Field Depth: 3.3cm

10.5x*
Field Size: 3.0cm
Field Depth: 2.2cm

*Available in FLM only.

Field size and depth measured at an 18" working distance. Achievable depth of field is dependent on the age of your eyes.

SurgiTel®

UltiView™ Lite

3.0x — **Field Size:** 8.0cm
Field Depth: 14.4cm

UltiView™

3.5x — **Field Size:** 7.0cm
Field Depth: 12.0cm

4.5x — **Field Size:** 6.0cm
Field Depth: 8.9cm

UltiView™ Pro

3.5x — **Field Size:** 8.0cm
Field Depth: 11.4cm

4.5x — **Field Size:** 6.5cm
Field Depth: 8.3cm

5.5x — **Field Size:** 5.0cm
Field Depth: 5.3cm

6.5x — **Field Size:** 4.0cm
Field Depth: 4.4cm

8.0x — **Field Size:** 3.5cm
Field Depth: 3.2cm

10.0x — **Field Size:** 3.0cm
Field Depth: 3.1cm

"I have acquired four pairs of SurgiTel loupes over the years of practicing (2.0x, 3.0x, 3.5x, and 6.5x) and continue to be comfortable. I have lent pairs out to friends who have been having terrible neck pain. Within days of wearing SurgiTel loupes, their neck pain diminished. They are lightweight, high quality, and deeply declinated to comfortably wear all day, procedure after procedure. I would never even consider changing companies."

— Dr. Nichole Anderson, DDS, RDH

FRAME OPTIONS

SurgiTel®

Scan to View All Frame Options

Frames Designed for Loupes

Not all frames are ideal for loupes. Our frames are designed and selected to meet certain requirements to deliver ergonomics, alignment, and safety.

1 Stable and Lightweight

Sturdy frames to keep loupe alignment from shifting especially needed for higher magnification oculars. Lightweight material for less pressure on your nose.

2 Ergo Fit Nose Pads

Adjustable Ergo Fit Nose Pad system for height and gap adjustments of the loupes to your eyes and adjustable shape for all nose types.

3 3-Point Fit

Wrap around design for added stability and comfort.

4 Pantoscopic Tilt

Pantoscopic tilt of frame and lens helps give the oculars a steeper declination angle and helps eliminate gaps between the face and the bottom edge of the lens to give better eye protection.

5 Mounting Block

Dovetail mounting for LED headlight and SurgiCam HD video camera.

6 Carrier Lens Rx

Rx available with some frames.

Oakley Frames

Nike Frames

SurgiTel Frames

Scan to Watch
Testimonial Video

"I commend SurgiTel for recognizing the potential retinal hazard from using very bright 'cool white light' LEDs. They have also taken steps to reduce the most dangerous blue light emission at 445 nm from the LEDs in their headlamps. I recommend that clinicians ask the manufacturers of LED headlamps and LED operatory lights to provide the spectral emission from their light source, not just the brightness or intensity of the light."

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

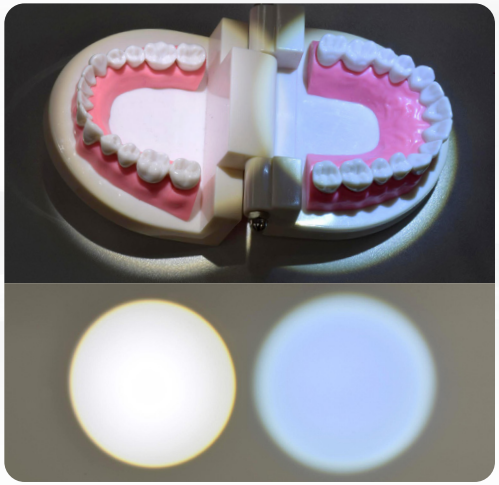
SurgiTel

AVOIDING THE POTENTIAL BLUE LIGHT HAZARD

Blue light is not healthy, yet many clinicians are using blue-tinted LEDs, even though they were advertised as true color. Third party evaluations have determined SurgiTel LEDs have the safest color temperate starting at 4,000K (Kelvin) while other brands range from 5,400K to 10,000K. Other benefits of eye safe, true colored dental lights and surgical lights include minimized eye-strain and best color accuracy.

The Stages of AMD

Normal Vision | **Early Signs** | **Intermediate** | **Advanced**



Example comparison of SurgiTel Neutral (left) vs competitor (right).

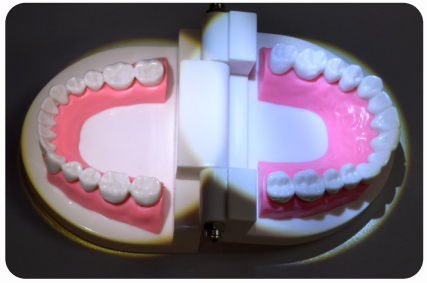
Scan to View All LED Comparisons

How to Evaluate Your Current LED Lights?

It is very difficult to estimate the degree of coolness of the LED beam you are using. The best way is to compare the beam of current LED headlight with a true color neutral LED headlight which has a balanced color spectrum and is safest to your eyes.

If you contact us, we can help you evaluate your current LED headlights by comparing them with our true color neutral LED headlights.

SurgiTel Neutral

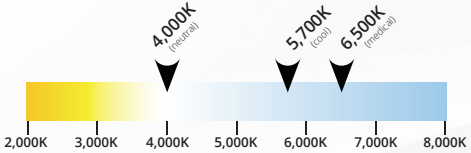


SurgiTel Cool

Photo Courtesy of ConfiDental MKE

LED HEADLIGHTS

SurgiTel's patented optics create a unique achromatic beam that creates a clear, even circle of light with no hot spots or fading edges. Different procedures require different light to see the unique anatomical features. That is why SurgiTel offers three different light temperatures (Neutral, Cool, and Cool Medical).



Odyssey Micro and Mini LED

Surgical Mini and Micro LED

Eclipse® CS Touch-Free Micro and Mini LED

Wireless Air Micro and Mini LED

Scan to View All Light Options, Benefits, and Specifications

Surgical Headband LED 2.0

SURGICAM® HD

Record and broadcast your procedures from a clinician's eye view.

- SugiTel's loupe mounted SurgiCam HD video system provides a clinician's eye view recording of procedures while encouraging a healthy and safe working posture.
- The SurgiCam® HD can be outfit with three magnification options: 2x, 3x, 5x.
- Loupe and headband mounting options available.

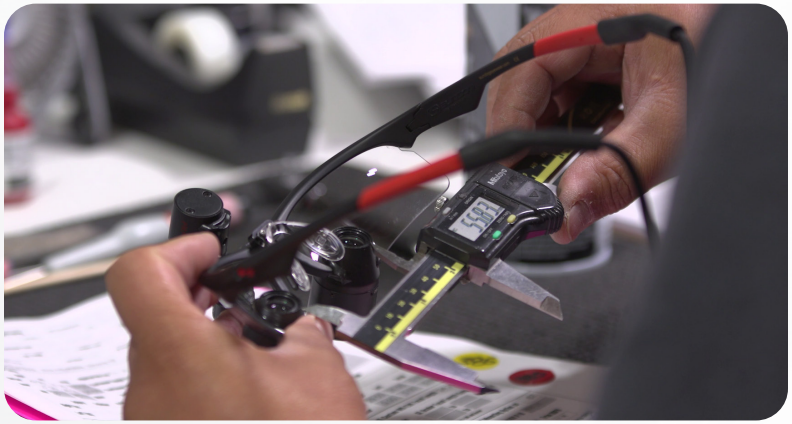
Scan to Learn More About the SurgiCam HD

LOUPE TUNE UP

Keep your loupes working like new, send them in for an annual tune up.

- Detailed inspection
- Professional, detailed cleaning
- Hinge replacement (FLM)
- Replacement of small parts where possible
- Side-shield replacement
- Retainer strap replacement
- Carrying case cleaning
- Evaluate loupe alignment
- Battery cell test – if LED is sent in
- And much more

Scan to Learn More about a Loupe Tune Up



EXPERIENCE THE SURGITEL DIFFERENCE

SurgiTel offers a suite of Vision and Ergonomic products including a full range of magnification loupes (2.5x to 10.5x), several true color LED headlight options, ergonomically designed stools, and loupe mountable HD cameras. SurgiTel has focused on innovations that follow 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. We achieve this by innovative products that enhance Vision, Posture, and Comfort.

Schedule an In-Person Demo and Evaluation (USA/Canada)

www.surgitel.com/evaluation

Find Your Local Sales Rep (USA/Canada)

www.surgitel.com/contact-directory

Find Your International Distributor

www.surgitel.com/international-distributors

Service and Support (USA/Canada)

www.surgitel.com/support

For customer care call or email us at
1-800-959-0153 / support@surgitel.com

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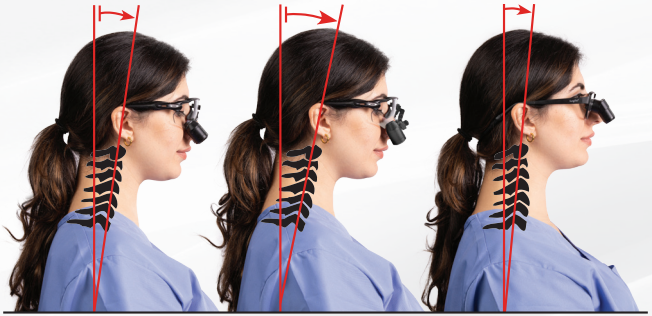
Stop Neck Pain!

with Ergonomic Loupes from SurgiTel.

Requirement of ergonomic loupes is a head tilt angle of less than 20-degrees.



SurgiTel TTL Hybrid Ergo™ Loupes
(Fixed DA)

SurgiTel Ergo FLM Loupes
(Adjustable DA)

SurgiTel ErgoDeflection™
(Fixed DA)

SurgiTel®
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