

ErgonoptiX



Surgical Loupes

ErgonoptiX Comfort

New Optics Technology

The new developments in optics technology and lightweight composite materials (metal, glass and plastics) utilized in ErgonoptiX Comfort Loupes deliver superior image quality in comparison to conventional optics.

The new micro Galilean Loupes produce an all-round crisp image, with a wide field of vision and an unparalleled deep focus range (up to 210mm).

Using the latest optics technology, in combination with these newly developed **lightweight materials**, ErgonoptiX produces highly optimised surgical loupe systems, suitable for the most demanding applications.



Precision

Lightweight

Viewing Angle

Interpupillary Adjustment

Improved Ergonomics

Flip-Up Function

Frames

Prescription

Multi-coated optics reduce reflection, provide a superior image and outstanding rendition.

Engineered using a lightweight metal alloy, providing increased stability and higher quality than is possible with conventional plastics.

Fully adjustable viewing angle (declination angle) reduces neck pain and improves posture.

One Step Easy Grip Knob ensures the loupes are optimally fitted to each individual.

Over 80% of dentists & surgeons suffer from back and neck pain
When using ErgonoptiX Comfort Loupes, a better working posture is automatically achieved.

The flip up function means the magnification system can easily be flipped from your line of sight with one easy move. Simply flip down again when required.

Lightweight, comfortable frames designed for ultimate function and versatility. Side shields and silicone nose pads provide full protection and optimal comfort.

Prescription lenses with your personal prescription can easily be added.

Surgical Loupes & Lights

Comfort micro Galilean: 2.5x and 3.0x

mini Galilean Binocular Loupes, Flip-Up type (30% smaller and lighter)

Comfort Galilean: 2.5x, 3.0x and 3.5x

Lightweight Galilean Binocular Loupes, Flip-Up type

2.5x



3.0x



3.5x



micro
Galilean



Galilean



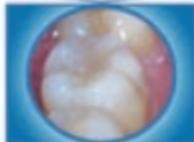
Comfort micro Prism: 4.0x

Lightweight, small size Prismatic (Keplerian) Binocular Loupes, Flip-Up type

Comfort Prismatic: 5.0x and 6.0x

High Power Prismatic (Keplerian) Binocular Loupes, Flip-Up type

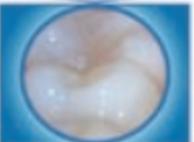
4.0x



5.0x



6.0x



Slim Prism



Prismatic



D-Light nano & micro - High power Portable LED Surgical Head-Light

Loupes



Head-Band



Clip-On



D-Light



ErgonoptiX Comfort

2.5x
ECG-2.5X



Model	Power	Working Distance	Field of View	Depth of Field	Black - Grey/Silver
ECG250S	2.5x	340mm / 13,4 in	90mm / 3,5 in	80mm / 3,1 in	42gr - 48gr
ECG250R	2.5x	420mm / 16,5 in	100mm / 3,9 in	90mm / 3,5 in	42gr - 48gr
ECG250L	2.5x	500mm / 19,7 in	110mm / 4,3 in	110mm / 4,3 in	42gr - 48gr
ECG250XL	2.5x	550mm / 21,7 in	125mm / 4,9 in	120mm / 4,7 in	42gr - 48gr



3.0x
ECG-3.0X



Model	Power	Working Distance	Field of View	Depth of Field	Black - Grey/Silver
ECG300S	3.0x	340mm / 13,4 in	60mm / 2,4 in	60mm / 2,4 in	48gr - 52gr
ECG300R	3.0x	420mm / 16,5 in	65mm / 2,6 in	80mm / 3,1 in	48gr - 52gr
ECG300L	3.0x	500mm / 19,7 in	70mm / 2,8 in	90mm / 3,5 in	48gr - 52gr
ECG300XL	3.0x	550mm / 21,7 in	75mm / 3 in	100mm / 3,9 in	48gr - 52gr



3.5x
ECG-3.5X



Model	Power	Working Distance	Field of View	Depth of Field	Black - Grey/Silver
ECG350S	3.5x	340mm / 13,4 in	55mm / 2,2 in	50mm / 2 in	52gr - 55gr
ECG350R	3.5x	420mm / 16,5 in	60mm / 2,4 in	55mm / 2,2 in	52gr - 55gr
ECG350L	3.5x	500mm / 19,7 in	65mm / 2,6 in	60mm / 2,4 in	52gr - 55gr
ECG350XL	3.5x	550mm / 21,7 in	70mm / 2,8 in	65mm / 2,6 in	52gr - 55gr



ECG

All Models Adjustable viewing angle: 0 - 45°
All Models Adjustable pupil distance
All Models Available in: Black or Grey/Silver

Galilean Loupes

ErgonoptiX Comfort Galilean range of Dental & Surgical Loupes

Designed for your optimal ergonomic comfort, and provide a wide field of view, combined with a deep focus range.

Multi-coated precision lenses for superb clarity and reduced reflection.
Ultra lightweight body and frame for maximum comfort.
Fully adjustable viewing angle, pupil distance and flip-up function.

ErgonoptiX Comfort Loupes provide ultimate flexibility as a multi functional surgical loupe.

Integrated new technology offers a wider and deeper field of vision, maximum ease of use & multi-functional capabilities.

Utilizing high performance lens systems that provide dental & surgical loupes with an extra wide field of view (up to 125mm), and a deep focus field (up to 120mm), while maintaining minimal weight (as little as 42 grams).

- * **Lightweight**, Galilean type binocular loupes.
- * **Maximum ease of use** combined with multi-functional capabilities.
- * **Multi-coated precision lenses** for superb clarity and reduced reflection.
- * **Ultra lightweight** body and frame for maximum comfort.
- * **Fully adjustable** viewing angle, pupil distance and flip-up function.

Personal
Comfort

- Black Canvas Carrying Case
- Removable Lens Covers
- Flip-Up Handle
- Side Shields
- Screwdriver
- Head Strap
- User Guide
- Micro-Fiber Cloth
- Calibration Target



Included in
Basic Set



Metal Frame - Black



Metal Frame - Silver



Classic Safety Frame
Black, Blue



Clip-On
Black, Silver

Choice of
Frame
(Included)

For optional (safety) Frames, Head-bands,
prescription lens inserts, and other accessories,
see the accessories page

Other Frames
& mounts
(Optional)

ErgonoptiX Comfort

Lighter

weight reduction

35-40%

Smaller

size reduction

30-40%

Better

Increased focus field

200%



2.5x

ECMG-2.5X



Model	Power	Working Distance	Field of View	Depth of Field	Black - Grey/Silver
2.5X - RD	2.5x	30-50cm / 11.7-19.5"	100mm / 3.9"	200mm / 7.8"	30gr - 0.96 ounce
2.5X - LD	2.5x	40-60cm / 15.6-23.5"	100mm / 3.9"	200mm / 7.8"	30gr - 0.96 ounce



3.0x

ECMG-3.0X



Model	Power	Working Distance	Field of View	Depth of Field	Black - Grey/Silver
3.0X - SD	3.0x	24-44cm / 9.4-17.2"	125mm / 4.9"	200mm / 7.8"	33gr - 10.6 ounce
3.0X - RD	3.0x	30-50cm / 11.7-19.5"	125mm / 4.9"	200mm / 7.8"	33gr - 10.6 ounce
3.0X - LD	3.0x	40-60cm / 15.6-23.5"	125mm / 4.9"	200mm / 7.8"	33gr - 10.6 ounce
3.0X - XLD	3.0x	50-70cm / 19.5-27.3"	125mm / 4.9"	200mm / 7.8"	33gr - 10.6 ounce



ECMG

All Models Adjustable viewing angle: 0 - 45°

All Models Adjustable pupil distance

All Models Available in: Black or Grey/Silver

micro Galilean Loupes

High Precision range of mini Galilean Dental & Surgical Loupes

ErgonoptiX micro Galilean loupes are Smaller, Lighter, yet Better than ever !

Utilizing a new high performance lens systems, ErgonoptiX introduces the micro Galilean loupes. While the micro loupes are significantly smaller, ErgonoptiX have managed to create an optical system which provide a crystal clear high resolution image with an enhanced field of vision, a wider and deeper focus field, and finally, a sharper image than older generation loupes.

Feather light loupes, for longer working hours and reduced fatigue.

The extreme low weight of the micro loupes system is conducive to easier working days, with less complaints of tired eyes, reduced neck and shoulder strain, and nose bridge irritation.

- * **30-40% reduced weight**, as little as 30 grams
- * **30-40% reduction in size**, smallest loupes with a wide view
- * **Wide field of vision** (up to 125mm)
- * **Extra deep focused field of view** (200mm)
- * **Maximum ease of use** combined with multi-functional capabilities.
- * **Multi-coated precision lenses** for superb clarity and reduced reflection.
- * **Fully adjustable** viewing angle, pupil distance and flip-up function.

mini Loupes

- Carrying Case (Black Canvas)
- Removable Lens Covers
- Flip-Up Handle
- Side Shields (for metal frames)
- Screwdriver (for adjustments)
- Head Strap (added stability)
- User Guide
- Micro-Fiber Cloth
- Calibration Target



Included
Accessories



Metal Frame - Black



Metal Frame - Silver



Classic Safety Frame
Black, Blue, White



Clip-On
Clips to your own frames

Choice of
Frame
(included)

For optional (safety) Frames, Head-bands,
prescription lens inserts, and other accessories,
see the accessories page

Other Frames
& mounts
(Optional)

Accessories For Comfort

Included in
Basic Set



- Canvas Carrying Case
- Flip-Up Handle
- Side Shields
- Head Strap
- Lens Covers

Also available
Separately



Side Shields
For metal frames

Clear Lens Covers
Removable & washable



Flip-Up Handle

Head-Strap
For added stability



Other
Accessories



**Anti-Fogging
Drops**

D-Light
Portable Head-Light



Carrying Case
Hard Aluminium

Carrying Case
Black Canvas



surgical Loupes



Metal Frame
Black



Metal Frame
Silver



Classic Safety Frame
Black, Blue



Clip-On
Black, Silver

Basic Frames

Choice of basic frame is included in basic set



Head-Band



Trendy Safety Frame
Black, Red



Flex Safety Frame
Black, Blue, Grey, Metal



Sporty Safety Frame
Black, Blue, Red, Grey

RX Insert
For prescription lenses



Special Frames

4A-coating
- Anti Scratch
- Anti Fog
- Anti UV
- Anti Static

RX
Prescription lens insert

RX-F
for Flex Frames
RX-S
for Sporty Frames

ErgonoptiX Comfort

4.0x
ECMP-4.0X



Model	Power	Working Distance	Field of View	Depth of Field	Weight
4.0X - S	4x	340mm / 13.4 in	60mm / 2.4 in	40mm / 1.6 in	65gr / 2.3 ounce
4.0X - R	4x	420mm / 16.5 in	60mm / 2.4 in	40mm / 1.6 in	65gr / 2.3 ounce
4.0X - L	4x	500mm / 19.7 in	65mm / 2.6 in	40mm / 1.6 in	65gr / 2.3 ounce
4.0X - XL	4x	550mm / 21.7 in	70mm / 2.8 in	40mm / 1.6 in	65gr / 2.3 ounce



5.0x
ECP-5.0X



Model	Power	Working Distance	Field of View	Depth of Field	Weight
5.0X - S	5x	340mm / 13.4 in	40mm / 1.6 in	35mm / 1.4 in	84gr / 2.7 ounce
5.0X - R	5x	420mm / 16.5 in	45mm / 1.8 in	35mm / 1.4 in	84gr / 2.7 ounce
5.0X - L	5x	500mm / 19.7 in	50mm / 2 in	35mm / 1.4 in	84gr / 2.7 ounce
5.0X - XL	5x	550mm / 21.7 in	60mm / 2.4 in	35mm / 1.4 in	84gr / 2.7 ounce



6.0x
ECP-6.0X



Model	Power	Working Distance	Field of View	Depth of Field	Weight
5.0X - S	6x	340mm / 13.4 in	40mm / 1.6 in	25mm / 1 in	84.5gr / 2.7 ounce
5.0X - R	6x	420mm / 16.5 in	45mm / 1.8 in	25mm / 1 in	84.5gr / 2.7 ounce
5.0X - L	6x	500mm / 19.7 in	50mm / 2 in	25mm / 1 in	84.5gr / 2.7 ounce
5.0X - XL	6x	550mm / 21.7 in	55mm / 2.2 in	25mm / 1 in	84.5gr / 2.7 ounce



ECMP & ECP

All Models	Adjustable viewing angle: 0 - 45°
All Models	Adjustable pupil distance
All Models	Available in: Black or Silver

Prismatic Loupes

micro Prism Loupes

High Power Prismatic Loupes

With all the advantages of lightweight Galilean loupes

The new ErgonoptiX micro Prism Loupes offer the high power of Prismatic lens systems, combined with lightweight materials and an easy adjustment mount, resulting in the same flexibility normally expected of Comfort Galilean loupes.

Same 4.0x magnification as conventional 4.0x prismatic loupes but now significantly reduced in size & weight

25% Smaller (47mm compared to 60mm)

25% Lighter (65gr compared to 80.5gr)

Available on with a wide variety of frame options and accessories.

micro Prism
4.0X



- Black Canvas Carrying Case
- Removable Lens Covers
- Side Shields
- Screwdriver
- Head Strap
- User Guide
- Micro-Fiber Cloth
- Calibration Target
- LightWeight Frame



Included in
Basic Set



Metal Frame - Black



Metal Frame - Silver

Choice of
Frame
(included)



Head-Band



Sporty Safety Frame
Prescription insert available

Other Frames
& mounts
(Optional)

For optional (safety) Frames, Clip-On,
prescription lens inserts, and other accessories,
see the accessories page

ErgonoptiX Comfort

D-Light

High Power mini LED surgical Head-Lamp Designed for optimal ergonomic comfort

Cool Light:

Specially developed for the medical professional, D-Light head-lamps utilize an advanced cooling system ensuring the lamp does not get too hot to touch.

Feather weight: only 9 gram,

True color: 6000 K

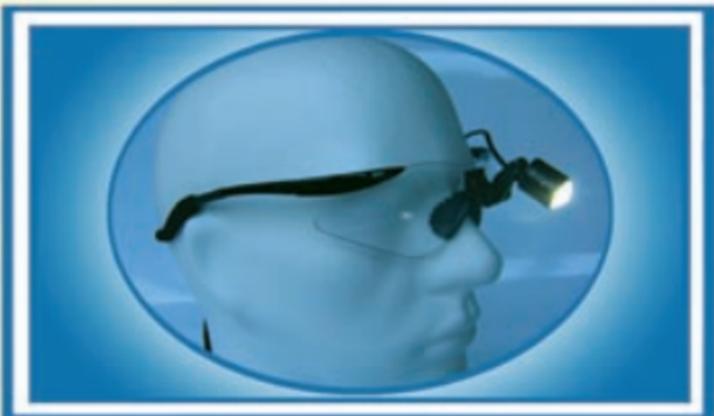
Easy Positional adjustment: Multiple hinge mount system.

Fully adjustable: Light intensity knob control

Slim model: Aluminum rechargeable power pack

Fully adjustable power level: 4 step indication

For dental use, a UV filter is included to avoid composite hardening



D-Light micro

The brightest medical LED Head-Light

Ultra High Power LED Technology:

85.000 Lux

Long-Life Li-polymer Power Pack:

7-10 hours usage on one charge



D-Light nano

Small size, yet extremely powerful light.

High Power LED Technology:

45.000 Lux

Extra Long-Life Li-polymer Power Pack:

8-12 hours usage on one charge



Surgical Head Lights

Portable Surgical Head Light

D-Light can be used mounted on surgical loupes, using an easy **Clip-On / Clip-Off** system

Both **D-Light nano & micro** come equipped with a standard loupe mounting option.

Double-Hinged Mount:

Allows maximum control for easy positioning.

Compatible mount parts also available for most other brands loupes.



D-Light
On Loupes

Galilean

Prismatic

universal



The **D-Light** Head-light can also function as a stand-alone Head-Lamp (no loupes required)

Available on all Ergonoptix frames and mounts, including:

Head-Band

Frames

Clip-On



D-Light
Stand alone

Portable Power Packs for Comfort D-Light Surgical Lights

PowerPack-1: For D-Light nano, up to 12 hours use one charge.

PowerPack-2: For D-Light micro, up to 10 hours use one charge.

Power Packs



Powerpack 1



Powerpack 2

ErgonoptiX Comfort

Purchasing new loupes

When purchasing new loupes, it is important that you choose the correct model in order to ensure you work in complete ergonomic harmony with your new loupes.

Assuming the correct working posture reduces eye strain, back / shoulder / neck tension, and the related stress-induced headaches.

Less known but no less important is the psychological impact:
Good ergonomics improve information processing and decision-making.

Which model do I need ?

The main factors to consider when choosing new loupe are:

- 1. Magnification** - Determine the appropriate magnification for your application
- 2. Working Distance** - Determine the best working distance for your personal needs
- 3. Frame Size** - The correct frame size will better stabilise the loupes
- 4. Field of view** (Width of field in focus) - A wider field is generally better
- 5. Depth of field** (Depth of field in focus) - A deeper field is generally better
- 6. Weight Of The Loupes** - Lightweight loupes reduce long term strain
- 7. Prescription Lenses (Corrective Lenses)** - What if I need prescription lenses?

1. Magnification:

The level of magnification used is most often based on personal preferences. However, there are a few guidelines to help in choosing the best magnification for your specific needs.

Experience shows that the most commonly used / recommended magnification for loupes in different medical fields are as follows:

Dentistry:	General / Hygiene / Implantology	2.5x - 3.0x
Surgery:	Orthopedic / Cardio / Abdominal	2.5x - 3.5x
Dentistry:	Endo / Crown / Bridge	3.5x - 4.0x
Lab Work:	Technician	4.0x - 5.0x

Our general recommendation for beginners is: start with the lowest comfortable magnification level, as this would provide the widest field of view, and is easiest to get accustomed to. As you get accustomed to working with loupes, you may decide to use higher magnifications.

2. Working distance:

The working distance refers to the distance between your eyes, and your work area.

You can measure your personal working distance by assuming your normal working position, making sure you are comfortable, that your back is straight and that you are not leaning forward too much (as most people tend to do). Perhaps you could ask someone to assist you in this procedure.

You can also use the following table for general reference (based on our experience):

Height	<170 cm	170-190 cm	>190 cm
Sitting	340 mm	420 mm	500 mm
Standing	420 mm	500 mm	550 mm

Magnification

Working Distance

Loupes Guide

3. Frame & Size:

The ErgonoptiX Protective Safety Frames are mostly "one size fits all", however, there is a size difference between the different models,

- Trendy Safety frames: size = Small-Medium
- Sporty Safety frames: size = Medium
- Flex Safety frames: size = Medium - Large

The ErgonoptiX metal frames are available in 3 different sizes: Small, Medium & Large.

The most important dimension for determining frame size is the temple distance. Find a pair of glasses that fit you comfortably (your own, others, sunglasses?) and measure the temple distance along the inside of the frame. (Preferably use a similar style, straight frame). Compare those measurements to the ErgonoptiX frames (see chart below) and choose the frame size that is closest to your own measurements.

Frame sizes	Small	Medium	Large
Temple distance:	126 mm	131 mm	139 mm

4. Field Of View:

The width of the area that is in focus through the loupes. Wider is nearly always preferred.

The size of the field of view often relates to the working distance and magnification. Simply stated: Loupes with a longer working distance will have a larger field of view. Simply stated: Loupes with a lower magnification factor will have a larger field of view.

With ErgonoptiX micro Galilean loupes this difference is minimal and the field remains wide.

All ErgonoptiX Comfort Loupes provide an extra wide field of view (up to 125mm).

5. Depth Of Field:

The depth of the area that is in focus through the loupes. Deeper is nearly always preferred.

The size of the depth of field relates directly to the working distance and magnification. Simply stated: Loupes with a longer working distance will have a larger depth of field. Simply stated: Loupes with a lower magnification factor will have a larger depth of field.

With ErgonoptiX micro Galilean loupes this difference is minimal and the field remains deep.

All ErgonoptiX Comfort Loupes provide an extra large depth of focus field (up to 210mm)

6. The Weight Of The Loupes:

Weight is an important factor when choosing new loupes, especially if the loupes are to be used continuously for long periods of time by a medical professional.

Lightweight loupes are more comfortable and will reduce tension and other mental and physical complications in the long term.

Ultra lightweight loupes, offer maximal comfort and related benefits.

ErgonoptiX Comfort Loupes utilize extremely lightweight materials and weigh as little as 30 grams (not including frame).

7. Prescription Lenses:

If you need glasses with prescription lenses, it is important that you have the option to fit your loupes frames with your personal lens prescription.

ErgonoptiX Comfort metal frames and special Ergon-OptiX RX inserts for safety frames can easily be fitted with normal prescription lenses by your local optician.

ErgonoptiX Comfort loupes are also available on a Clip-On option.

Frame Size

Field Of View

Depth Of Field

Weight

Prescription Lenses

Warranty

ErgonoptiX guarantees its products against defects in material and workmanship for a period of **two (2) years from the date of purchase**. During this time, ErgonoptiX will repair (or may decide to replace) free of charge any ErgonoptiX product that prove defective.

Warranty

Focus On

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