



Industrial products for electronics, cosmetology,
low vision and other applications



Magnification is essential to a large number of applications

Many industrial operations including assembly, inspection and rework, rely on the use of illuminated magnifiers for the proper viewing of a product's components. Low vision customers rely on quality illuminated magnifiers to provide users with accurate color rendering and magnification. Cosmetics and cosmetology applications depend on illuminated magnifiers to withstand the rigors of everyday use in health spas and beauty salons.

A number of industries are particularly sensitive to electrostatic discharges (ESD), and need to establish measures for eliminating static. ESD-Safe magnifiers are a valuable tool in these industries as they help guard against uncontrolled static dissipation. UV magnifiers, which contain UV-A lightsources, allow for the inspection of conformal coatings, welds, solder joints, and other areas of stress contamination. Under ultraviolet light, UV tracers glow a dark purple color allowing technicians to ensure proper coverage.

The history of Luxo illuminated magnifiers

Luxo's history of lighting for the individual began with the development of the L-1 task light in 1937. The freedom of movement and the ability to place light exactly where it was needed forever changed the way task lights are used.

L-1 was designed by Luxo's founder, the Norwegian industrialist Jac Jacobsen, and is still in production today. The lamp arm is balanced by springs that work on the action and reaction principle of human arm muscles.

Jac Jacobsen soon realized that his spring-balanced arm could carry a variety of different luminaires, including illuminated magnifiers, for numerous purposes.

The decades following saw Luxo's development of a range of illuminated magnifiers for industrial applications, electronics, therapy and cosmetology, low vision and the healthcare sector.

Modern range of arm-based magnifiers

Naturally, Luxo's range of products has been vastly expanded since those early days. However, the philosophy and knowledge from the development of the L-1 is still maintained in all of Luxo's modern products. Today, Luxo's range of illuminated magnifiers and industrial task lights comprises a wide variety of arm technologies, with internal or external springs. They all have perfect balance and careful ergonomics built into them.

Luxo pioneered the development of illuminated magnifiers for industrial use. This L-1 L magnifier was manufactured in 1955 and is still in use today.





KFM LED

Perfect balance, maximum flexibility

Luxo's magnifiers are specially designed to maximize horizontal and vertical movement. They provide significant horizontal reach, and will always stay in the right position without drifting. The arms are balanced by spring systems which ensure smooth and easy positioning – no knobs to tighten, nothing to adjust.

The ability to position the lens and direct the light exactly where it is needed is the hallmark of Luxo's illuminated magnifiers. The flexibility of the lamp head means that it is easy to adjust the magnifier for your personal needs.

Friction-free lamp head movements

It is the combination of arm and head movements that determines the degree of flexibility in a magnifier. Luxo's magnifiers are highly flexible, offering a combination of the three all-important head movements:

- Horizontal side-to-side movement (yaw)
- Up and down movement (tilt)
- Rotation around a horizontal axis (roll)

The flexibility of the self-balancing arm and friction-free joint between the lamp head and arm makes exact positioning easy.



Self-balancing, friction-free arm.



Friction-free joint between the lamp head and arm.





The importance of light quality

At Luxo we know how important light is for the working environment and for the health and well-being of an individual in a workplace. Good lighting reduces the risk of health problems, increases safety, and enhances productivity.

For this reason, Luxo places great importance on the light quality of our illuminated magnifiers. They are not just magnifiers with light, but powerful luminaires with excellent light output. The quality and exact positioning of the light sources in relation to the lens allows for virtually shadow-free magnification and excellent color rendering capabilities

LED: Lightsource of the future

Over the past few years, Luxo has designed and manufactured a new generation of luminaires, all featuring LED instead of traditional light sources. Light Emitting Diodes (LEDs) are semiconductors that emit light when an electric current passes through them. LEDs can be used on their own, or assembled into modules for added power.

Ergonomic. Energy-efficient. Economic.

Luxo's modern LED magnifiers are designed to provide the best possible ergonomics, while saving energy. They use only a fraction of the energy required by luminaires with traditional light sources.

LEDs have an incredibly long life span. The diodes in Luxo LED magnifiers have a life expectancy of more than 50,000 hours. That equates to 25 years or more with normal use.

LED magnifiers

WAVE® LED

Rectangular lens LED magnifier

No knobs to tighten, nothing to adjust. The WAVE LED has a flexible, self-balancing shade and hands-free neck assembly which allow the lamp head to be secured in any position. The fully-enclosed neck design is ideal for cosmetics, cosmetology and other environments where foreign object debris (FOD) is a concern. An automatic shut-off feature further ensures energy savings. WAVE LED offers shadow-free magnification with light coming from both sides, as well as three-dimensional magnification lighting from the left or right. The 3D-feature is especially welcome when working with circuit boards and similar delicate objects in inspection and rework applications.

Technical details

Lightsources: Two 6W dimmable LED modules. 13W total energy consumed. 4600 lux at 11" focal length. CCT: 4000°K. CRI: 80.

Body material and color: Steel arm and die-cast aluminum shade. Fully-enclosed neck design. Colors: light gray and white.

Optics: 3.5- (1.88X) or 5-diopter (2.25X), 6.75" x 4.5" rectangular white crown optical-quality glass lens.

Secondary lenses: For additional magnification a secondary 4-, 6- or 10-diopter STAYS lens can be attached to the primary lens.

Arm technology and movement: Heavy-duty internal-spring 45" or 30" parallel, three-pivot K-arm.

Timer and dimming: Step dimming 0-50-100%. 9/4 hour auto shut-off.

Mounting: Edge clamp or weighted base.
UL/cUL listed



Part numbers	Old part numbers	
WAL025968	18845LG	WAVE LED, 3.5-diopter, 45", edge clamp, light gray
WAL025970	18846LG	WAVE LED, 3.5-diopter, 30", edge clamp, light gray
WAL026133	18847LG	WAVE LED, 3.5-diopter, 30", weighted base, light gray
WAL025969	18945LG	WAVE LED, 5-diopter, 45", edge clamp, light gray
WAL026445	-	WAVE LED, 5-diopter, 45", edge clamp, white
WAL025971	18946LG	WAVE LED, 5-diopter, 30", edge clamp, light gray
WAL026135	18947LG	WAVE LED, 5-diopter, 30", weighted base, light gray