www.osram.com | www.sylvania.com

Where brightness and reliability are essential.

Specialty light sources for medical and industrial applications.

SEE THE WORLD IN A NEW LIGHT

OSRAM

Designed to fit your application and exceed your expectation.

Halogen XENOPHOT® HLX®

- Tungsten halogen low voltage with or without reflector
- Xenon gas filled lamps produce up to 10% higher luminous efficacy than standard lamps

Focused Xenon Light XBO® R 300 W

- Xenon discharge lamp for DC operation
- Short arc
- Focus diameter of approx. 5 mm
- Reflector coated for maximum reflection in visible spectral range
- Ozone-free
- Hot re-strikeable

Focused UV and Blue Light (Long Life) HXP® R 120 W UV

- Mercury discharge lamp for AC operation at constant power
- Short arc
- Long-life: average 2,000 hours
- Focus diameter of approx. 5 mm
- Reflector coated for maximum reflection in 320 ... 500 nm range

Focused Light (Long Life) HXP® R 120 W VIS

- Mercury discharge lamp for AC operation at constant power
- Short arc
- Long-life: average 2,000 hours
- Focus diameter of approx. 5 mm
- Reflector coated for maximum reflection in VIS (visible) spectral range

Focused Light (Long Life) HXP® R 200 W VIS/UV

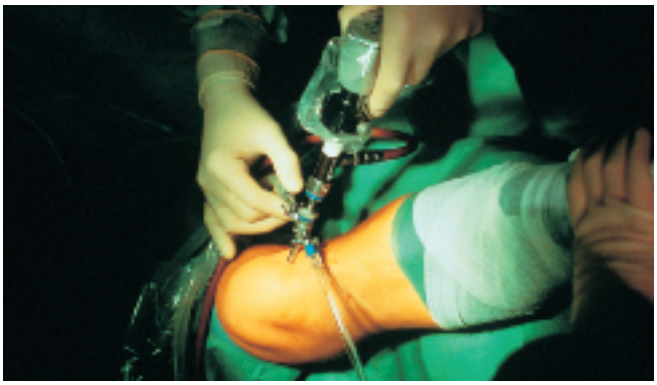
- Mercury discharge lamp for AC operation at constant power
- Short arc
- Long-life: average 2,000 hours
- Focus diameter of approx. 5 mm
- Reflector coated for maximum reflection in UV to VIS (visible) spectral range

Intense UV-C radiation for Surface Cleaning XERADEX®

- 20 W to 100 W excimer lamp system
- Patented pulse operating principle obtains four times higher efficiency compared to conventional operations
- VUV radiation at 172 nm wavelength
- Efficient ozone generation
- No cooling required

Infrared Coated Capsule XIR

- Tungsten halogen capsule filled with Xenon gas and infrared (IR) coating for maximum energy efficiency
- IR capsule produces up to 30% higher luminous efficacy than standard lamps in the same terms of condition (wattage and lamp life)



Medical Fiber-Optics

Requirements

Illumination of human organs or tissue with white light containing a well-balanced mix of colors in its spectrum. High color rendering index. Focused light beam for easy and efficient coupling into light guides with small diameters.

Solutions

- XBO® R 100W
- XBO® R 180W
- XBO® R 300W
- HLX® 64627
- HLX® 64634
- HLX® 64653

Typical applications

Endoscopic light sources
Overhead light sources

Surgical Lighting

Requirements

Instant brilliant light and light output over life with a constant color temperature and excellent color rendering. Tungsten halogen lamps can be operated easily, they are environmentally preferable (mercury free) and easy to dim. The new XIR-lamp family — Xenon lamps with IR-coating carry out up to 50% more light in the surgical lighting system.

Solutions

- 64291 XIR
- 64292 XIR
- 64668 XIR
- HLX® 64638
- HLX® 64642
- HLX® 64643
- HLX® 64647
- HLX ® 64650

Typical applications

Surgical lighting

Microscopy

Requirements

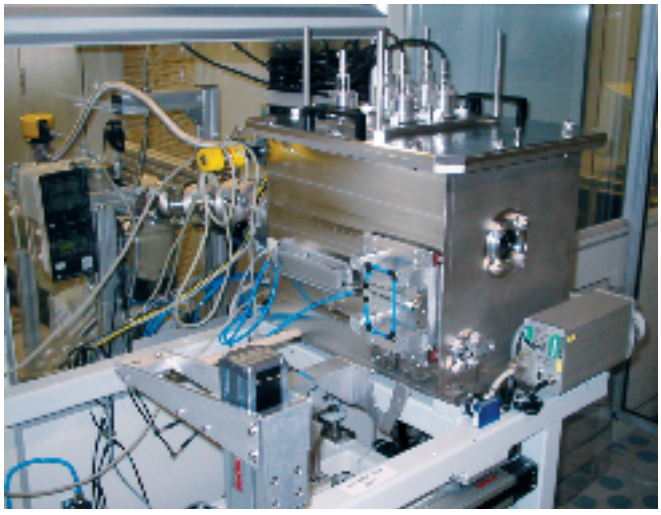
Illumination of slide preparations through small diameter optics. Different wavelengths applicable for different fluorescent markers, therefore a wide-range spectrum from UV-A through blue and green to red color is required. Long-life for time-consuming screening tasks.

Solutions

- HBO® 50W/AC
- HBO® 100W/2
- HBO® 103W/2
- HXP® R 120W VIS
- Halogen lamps

Typical applications

Fluorescent microscopy
Inspection microscopy



Sterilization with UV radiation

Requirements

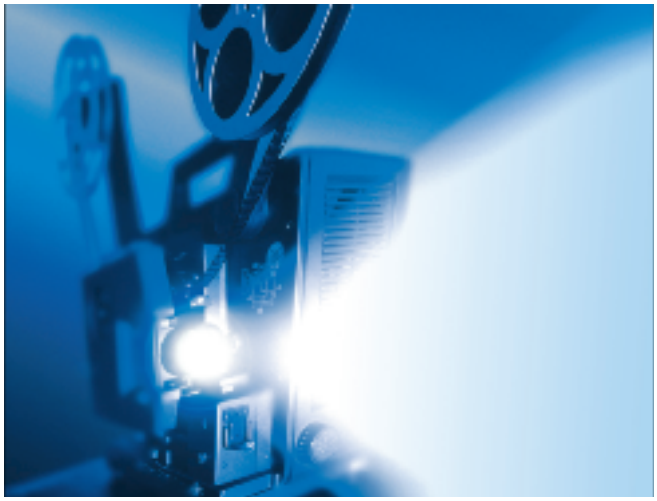
High germicidal efficiency with surface radiation.

Solutions

- XERADEX®

Typical applications

- Intensive UV-C radiation for direct germicidal effects



Projection

Requirements

Illumination of small frames for projection of films, still images or patterns. Depending on specific application, either a well-balanced continuous light spectrum with high color rendering index or peak-like spectrum. High intensity for high-speed exposures (3D scanning).

Solutions

- HXP® R 120W VIS
- HXP® R 200W VIS/UV
- XBO® R 300 W

Typical applications

- Projection of patterns for optical 3D scanning

Curing: Adhesive and Composites

Requirements

Exposure of light activated adhesives to UV-A or to blue color light. High irradiation level required for short curing times of adhesives in industrial or dental composites in dentistry. Long-life for mass production processes.

Solutions

- XBO® R 180W
- XBO® R 300W
- HBO® R 103W
- HBO® 200W
- HXP® 120W UV
- HXP® R 200W VIS/UV
- 64617
- 64617S
- 64613
- 64624

Typical applications

- Curing of dental composites
- Curing of adhesives

Production and Quality Assurance Inspections

Requirements

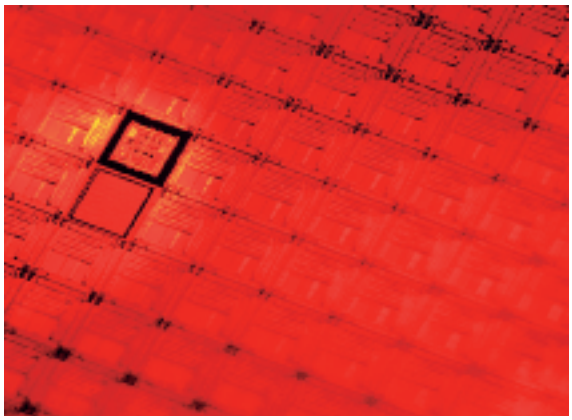
Small area illumination: Focused light beam for efficient coupling into light guides or microscopy optics. High intensity for short camera exposure times. Long-life.

Solutions

- XBO® R 100W
- XBO® R 180W
- XBO® R 300W
- HXP® R 120W VIS
- HXP® R 200W VIS/UV

Typical applications

- Illumination of product lines



Biotechnology

Requirements

Intensive and efficiently focused near UV-A beam for triggering chemical reactions, e.g. in nucleotide chains. Additionally, visible light beam to trigger fluorescence of fluorescent markers. Long-life.

Solutions

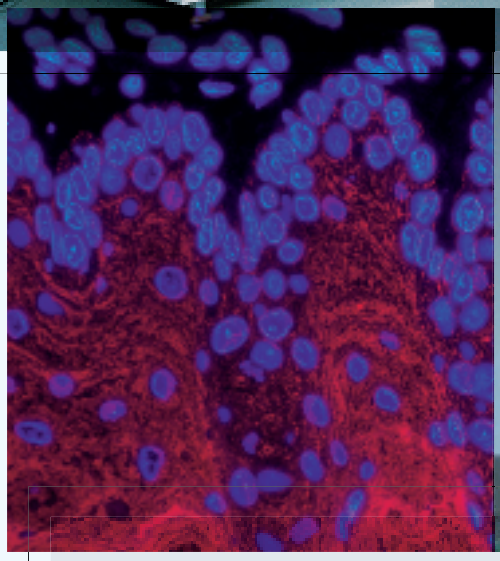
- HXP® R 120W VIS
- HXP® R 200W VIS/UV

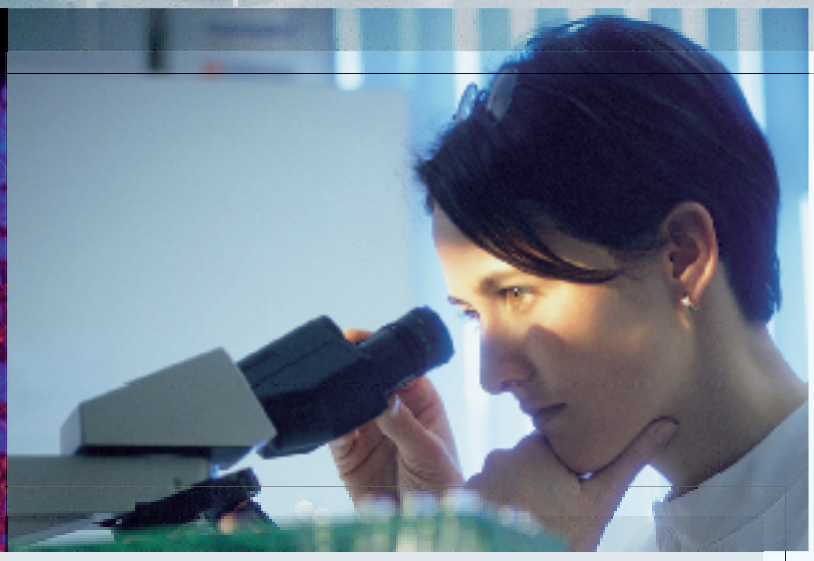
Typical applications

- Synthesis of oligonucleotide microarrays
- Readout of microarrays

The right lamp whatever your application:

Whether your application ranges from microscopic investigation to display systems, OSRAM has established itself as a reliable partner with its extensive know-how as a system supplier and one of the world's largest manufacturers of light sources in the medical and industrial field.





For further information please contact:

OSRAM GmbH

Head Office

Hellabrunner Str. 1
81543 Munich

Phone +49 (0) 89-62 13-0
Fax +49 (0) 89-62 13-20 20

www.osram.de
www.osram.com
catalog.myosram.com/DE
catalog.myosram.com/EN

OSRAM GmbH

Display/Optic Division

Nonnendammallee 44-61
13629 Berlin

Phone +49 (0) 30-33 86-21 74
Fax +49 (0) 30-33 86-23 59

e-mail: info@osram.com

OSRAM SYLVANIA (US)

Display/Optic Division
National Customer
Service and Sales Center

18725 N. Union Street
Westfield, IN 46074

Phone +1-888-677-2627
Fax +1-800-762-7192

www.sylvania.com

123S001GB OSRAM CSM CC 11/06 RO Subject to change without notice. Errors and omissions expected. Printed on paper treated with chlorine-free bleach.