Laser Eye

A safety goggle for use at all visible wavelengths and beyond

A high-performance eye-protective goggle design is on offer which allows for maximum eye protection over all operational frequencies, including those in the visible spectrum.

Applications and Benefits

- Laser labs
- Welding protection
- Hot furnaces (e.g., in steel work)
- Operations with hot plasma
- Airline pilots
- Entertainment Industry

Advantages and Benefits

- Protection against an unprecedented wavelength range
- Protection from both coherent and incoherent light sources
- 100% safe eye-protection for most class 4 lasers
- Protection against direct and indirect radiation for longer periods
- Additional sense to radiation invisible to the naked eye
- Camera can survive higher damage thresholds than the human eye
- Low cost cameras can be rapidly replaced
About

Lasers produce a concentrated beam of light which can cause permanent eye damage if viewed directly. Standard protective goggles block out a narrow frequency range which must be matched to the laser in use. However if the laser uses multiple wavelengths, or if these occur in the visible spectrum then the user may not even be able to see what they are working on.

These goggles can guarantee 100% protection for most class 4 lasers on the commercial market and protect eyes better against all direct or indirect radiation for longer periods and against higher power levels than established commercial laser goggles. Any exposure to dangerous light levels will protect the eyes of wearer. In the case of very high powered lasers the maximum damage would be to an easily replaceable camera.

Development Status

The design and test pieces were developed at the Faculty of Physics of the University of Vienna. A prototype is under construction.

Intellectual property Status

European priority application has been filed. A PCT application will be filed before the end of the priority period.

Contact

To discuss licensing or collaboration opportunities, including future joint research projects, please contact:
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