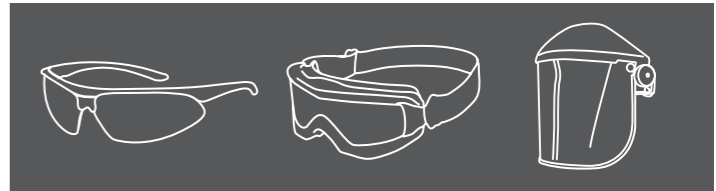


RISK SUITABILITY GUIDE

The prime considerations when selecting eye and face protection are the risks or hazards in a workplace area or those posed by a certain task. Eye and face hazards can be considered by type but often there may be a combination of hazards present – for example, in an outdoor construction environment, a faceshield may require UV, sunglare, and impact protection in combination. This guide is designed to highlight which types of products are capable of offering

protection against certain risks. Please note that not every risk shown will be covered by every eye protector of that type – it is important to check performance properties and markings of each product prior to selection or use. A full risk assessment must be carried out prior to selection of eye and face protection – this guide does not replace the proper risk assessment required.



MECHANICAL RISK

Mechanical risks refer to impacts from high speed particles, debris or dust, such as machining and use of power tools.

Workplace applications: Cutting, grinding, general engineering, use of staple and nail guns



OPTICAL RADIATION RISK

Optical radiation risk describes types of radiation that affect the eyes. Commonly this can be UV radiation in sunlight, but also includes Infrared radiation, visible light, and welding arcs.

Workplace applications: Outdoor work, ports, welding, engineering



CHEMICAL RISK

Chemical risks refer to tasks involving the handling or production of chemicals, with dangers posed by acids, solvents, gases, and other harmful substances.

Workplace applications: Laboratory work, agriculture, chemical production and supply



ELECTRICAL RISK

Electrical risks refer to tasks where there is a risk of short circuit electrical arc or arc flash.

Workplace applications: Electrical works, industrial electrical industry, motorway and road construction



THERMAL RISK

Thermal risks refer to operations where there is a risk from molten metal splashes, hot particles and sparks.

Workplace applications: Welding, grinding, cutting, foundry work

POTENTIAL WORKPLACE RISKS	PRODUCT MARKING	EN STANDARDS	SPECTACLES & OVERSPECTACLES	GOGGLES	FACESHIELDS
High energy impact 190m/s	A	EN 166			✓
Medium energy impact 120m/s	B	EN 166		✓	✓
Low energy impact 45m/s	F	EN 166	✓	✓	✓
Increased robustness	S	EN 166	✓	✓	✓
UV radiation	2- / 2C-	EN 166 / 170	✓	✓	✓
Solar radiation for industrial use	5- or 6-	EN 166 / 172	✓	✓	✓
Welding	1.7/3/5	EN 166 / 169	✓	✓	✓
Liquid droplets	3	EN 166		✓	
Liquid splash	3	EN 166			✓
Large dust particles (>5 microns)	4	EN 166		✓	
Gas/fine dust particles (<5 microns)	5	EN 166		✓	
Short circuit electric arc	8	EN 166			✓
Electric arc flash	8-1-0*	GS-ET-29			✓
<small>*Example as listed in the standard</small>					
Molten metals and hot solids	9	EN 166		✓	✓

Please note: this table shows which types of protectors can provide protection against certain risks. Not every protector of that type will share all properties – it is therefore important to check performance properties and markings of each product prior to selection or use.