EYE & FACE PROTECTION

Choosing the right eye protection



EUROPEAN STANDARDS EN 166

To assist you in your understanding of markings on Eye Protection Products covered by this Standard you should note:

Optical Standard:	Frame	Lens	
Class 1: For Continuous Work	-	1	
Class 2: For Intermittent Work	-	2	
Class 3: For Occasional Work, but must not be worn continuously	-	3	
Mechanical Properties:			
Increased Robustness (General Purpose)	-	S	
High Energy Impact (190m/sec)	А	А	
Medium Energy Impact (120m/sec) Grade 1	В	В	
Low Energy Impact (45m/sec) Grade 2	F	F	
Increased Robustness - General Purpose Impact -			
Performance at Extremes of Temperature	Т	Т	
Areas of Use:			
Liquids (chemical)	3	-	
Large Dust Particles	4	-	
Gas and Fine Dust Particles	5	-	
Short Circuit Electric Arc	8	-	
Molten Metals and Hot Solids	9	9	
Optional:			
Resistance to Misting/Fogging	-	Ν	
Resistance to Mechanical Damage (Anti-Scratch)	-	К	

NB: The "A", "B", "F" and "S" markings on frame and lens represent tests carried out on each component and therefore may be different - in which case the lower level must be assigned to the complete unit when making an assessment.

EN 169 Welding Filters

- EN 170 Ultra-Violet Filters
- EN 171 Infra-red Filters
- EN 172 Solar Protection Filters for Industrial Use
- EN 175 Welding Work Equipment
- EN 207 Laser Protection Eyewear
- EN 208 Laser Adjustment Eyewear

To help choose safety evewear best suited to your needs the following information may be useful. Whilst every effort should be made to remove hazards as the result of a Workplace Risk Assessment, if safety eyewear is necessary as a last resort, the following selection criteria should be considered:

- Type of Hazard
- Type of Protection
- Type of Lens

TYPE OF HAZARD

- Hazards fall into 4 main categories: 1. Mechanical – Flying Debris, Dust or Molten Metal
- 2. Chemical Fumes, Gases or Liquid Splash
- 3. Radiation Heat (Infra-red), Ultraviolet light or Glare
- 4. Laser Light Over a wide

spectrum of wavelengths from Ultraviolet to Infra-red

TYPE OF EYE PROTECTOR

- SAFETY SPECTACLES Comfortable and available in a variety of styles. Will not keep out dust, gas or molten metal. We also offer a complete prescription safety eyewear service, please see page 12 for available prescription lenses
- SAFETY GOGGLES Can provide protection for all types of hazards. May be worn over spectacles
- SAFETY FACESHIELD Protects the face as well as the eyes but does not keep out dust or gas. Comfortable to use for long periods.

CLEAR LENS

General purpose for indoor applications that require impact protection. Provides 99% protection from harmful UV-B rays.

SMOKE

Protection from sunlight, excessive glare and high levels of hazardous light, ideal for all outside workers. Full colour recognition.

MIRROR

Reduces sun glare and intense sunlight, mirror coating reflects glare. Full colour recognition.

AMBER

Ideal for low-light environments, artificially lit areas, dawn and dusk. Provides high definition visibility and good contrast in low light.

ANTI-SCRATCH/ **ANTI-FOG**

High impact but scratch resistant optically correct material based on polycarbonate with a guartz crystal coating on the front of the lens and anti-fog on the rear. This lens absorbs both UVA and UVB light up to a wavelength of 400 nanometres.

ANTI-MIST

Many products in this section feature anti-mist coatings and are marked with this icon:

ANTI-SCRATCH

High impact but scratch resistant optically correct material based on polycarbonate with a quartz crystal coating on the front of the lens. This lens absorbs UVA and UVB light up to a wavelength of 400 nanometres. Many products in this section have anti-scratch properties and are marked with this icon:

