

# Eye Protection Buying Guide

## Choosing Safety Eyewear

To help choose safety eyewear 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 section criteria should be considered:

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

## Anti-mist- Anti-scratch

Does your eyewear reach the standard?

“K” and “N” are coating treatments that reach the standard set by EN 166. It’s easy how to find out, you just look for the “K” (anti-scratch) and “N” (anti-mist) on the lens of your safety glasses, goggles and face shields.

By EN law all safety eyewear needs to be marked on the lens. If the lens doesn’t have “K” or “N” marked on, then they do not reach the required standard.

N = Anti-mist treatment, which, due to its chemical and physical abilities, prevents the formation of condensation by absorbing the humidity drops. The coating is permanent and it offers performance to the standards required by EN 166.

K = Anti-scratch treatment applied to the surface of the lens whose hardness is a barrier against superficial damages that can impair vision. The coating is permanent and it offers performance to the standards required by EN 166.

## 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)		A	A
Medium Energy Impact (120m/sec) Grade 1		B	B
Low Energy Impact (45m/sec) Grade 2		F	F
Increased Robustness – General Purpose Impact-Performance at Extremes of Temperature		T	T
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		-	N
Resistance to Mechanical Damage (Anti-Scratch)		-	K

<b>EN 169</b>	Welding Filters
<b>EN 170</b>	Ultra-Violet Filters
<b>EN 171</b>	Infra-red Filters
<b>EN 172</b>	Solar Protection Filters for Industrial Use
<b>EN 175</b>	Welding Work Equipment
<b>EN 207</b>	Laser Protection Eyewear
<b>EN 208</b>	Laser Adjustment Eyewear

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.

## 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 Protection:

### 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.

### Safety Goggles

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.

### Indoor/Outdoor

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

### Yellow

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

### Platinum

Bollé Safety revolutionized eye protection with an innovation that exceeds the requirements of all international standards, especially the EN 166 KN option. It guarantees greater safety, reliability and comfort. This permanent coating on both sides of the lens gives a high resistance to scratching, to the most aggressive chemicals and delays the onset of fogging for well over 2 minutes.

### CSP (Comfort Sensory Perception)

Lens coating that provides 100% protection against UVA & UVB rays and blue light. This innovative coating is an effective solution for all activities that alternate exposures to bright light and low light. Suitable for extreme hot and cold temperature environments. CSP is also a combination of the platinum double sided anti-scratch and anti-mist fog coating.

### ESP (Extra Sensory Perception)

ESP provides 100% protection against UVA & UVB rays, filtering filters out 70% of blue light. Transmits over 60% of visible light.

### Twilight

Twilight offers the advantages of ESP but with a double anti-mist coating on both sides. This prevents fogging in the most challenging of conditions. Twilight are designed to be used in low light conditions, it improves contrast. Its light transmission rate is perfect for indoors or outdoor. It filters 76% of blue light.

## Anti-Mist

Many products on this website 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 on this website have anti-scratch properties and are marked with this icon to the right.