

# 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	AREAS OF USE:	Frame	Lens
Class 1:	For continuous work	-	1	Liquids (chemical)	3	-
Class 2:	For intermittent work	-	2	Large Dust Particles	4	-
Class 3:	For occasional work, but must not be worn continuously	-	3	Gas and Fine Dust Particles	5	-
				Short Circuit Electric Arc	8	-
				Molten Metals and Hot Solids	9	9

  

MECHANICAL PROPERTIES:	Frame	Lens	OPTIONAL:	Frame	Lens
Increased Robustness (General Purpose)	-	S	Resistance to Mechanical Damage (Anti-Scratch)	-	K
High Energy Impact (190m/sec)	A	A	Resistance to Misting/Fogging	-	N
Medium Energy Impact (120m/sec) Grade 1	B	B			
Low Energy Impact (45m/sec) Grade 2	F	F			
Increased Robustness – General Purpose	T	T			
Impact-Performance at Extremes of Temperature					

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.

## ANTI-MIST, ANTI-SCRATCH? DOES YOUR EYEWEAR REACH THE STANDARD?

“K” and “N” are coating treatments that reach the standard set by EN166. 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 should have these marks, so any lenses lacking the “K” or “N” symbols do not reach the required standard.



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 EN166

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 EN166

## SAFETY SYMBOLS AND CODES

We have developed a range of safety icons to help you compare and find the right eye protection.



Anti Scratch K



Anti Scratch



Anti Mist N



Anti Mist

- 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