European Standards and Markings

The Frames and lenses of tailor-made prescription safety spectacles in accordance with European standard 166 must feature a permanent mark.

Independent testing institutes carry out certification of the materials at regular intervals.

Frames and lenses must be marked with the manufacturer's identification and the mechanical strength. The lenses must also be marked with the optical quality class.

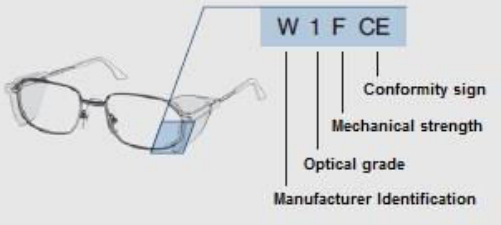
The different methods used to test mechanical strength vary according to the lens material. The test methods are defined under European Standard EN166.

If the mechanical strength level marked on the lens differs from that on the frame, the lower mechanical strength applies to the eye protection as a whole

Marking according to EN 166

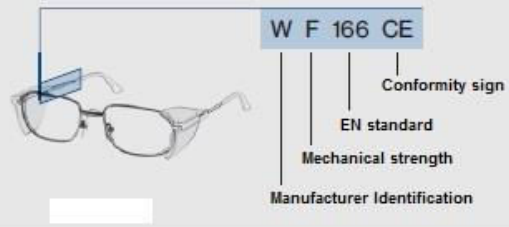
Lens Marking

Manufacturer Identification	Optical grade	Mechanical stregth
W	1	S - Increased robustness F - Low-energy Impact (45m/sec) B - Medium Energy Impact (120m/s)



Frame Marking

Manufacturer Identification	Mechanical strength	Applicable EN standard
W	S - Increased robustness F - Low-energy Impact (45m/sec) B - Medium Energy Impact (120m/s)	166



Basic requirements in accordance with EN166 (extract)
- Mechanical strength

Increased Robustness	Impact resistance, low energy	Impact resistance, medium energy
Ball bearing drop test, dropping a ball bearing (0, 44 g) against the lens/supporting frame from a height of 1,30m	Firing a ball bearing (0.88 g) against the lens/supporting frame. Impact speed 45m/s (162km/h)	Firing a ball bearing (0.88 g) against the lens/supporting frame. Impact speed 120m/s (432km/h)
Identification class: S	Identification class: F	Identification class: B

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