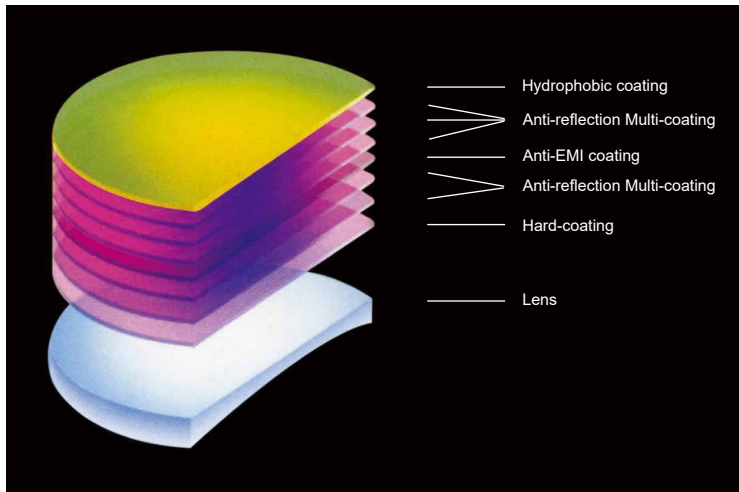


Appendix 1 Coatings

Coating Structure

If necessary, additional hard-coating, AR (anti-reflection) multi-coating, HMC+EMI coating, and Hydrophobic (waterproof) coating will be provided. Coating structure is as follows.



Structure of Coatings



Ultrasonic Cleaning

Hard Coating

After thorough preparation, the plastic lenses are given a hard protective coating by dipping them into a polysiloxane lacquer. The lacquer is optimally matched to the base lens and the coating structure, it is reinforced by nano-particles to increase hardness and abrasion resistance.

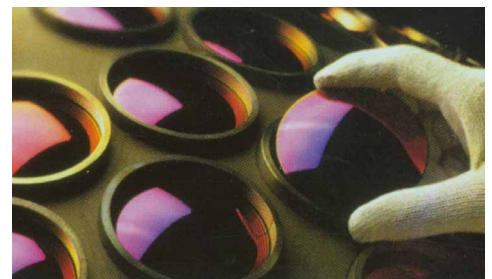
The pencil hardness of non-tintable hard-coating is up to 7H; pencil hardness of color tintable hard-coating is up to 6H.



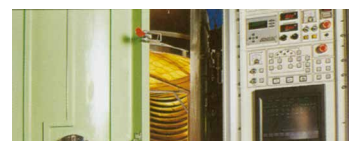
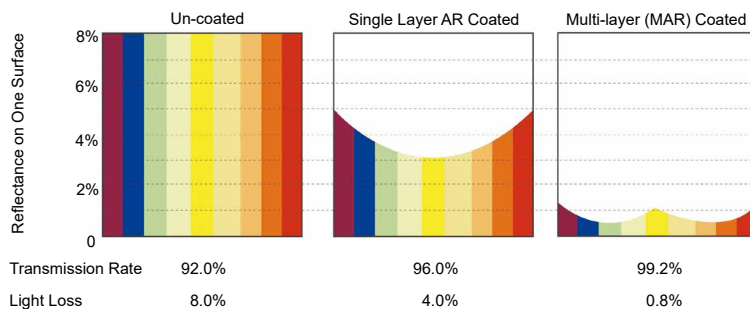
Hard Coating

AR+EMI Coating

Now, most ophthalmic lenses have AR (anti-reflection) multi-layer coating which is applied in a vacuum deposition system, some lenses also have Anti-EMI coating (Electro Magnetic Interference Blocking). The multi-layer, broad-band anti-reflection coating is applied in a vacuum coating machine. The coating provides optimum transparency with very low residual reflection.



Transmission Comparison with White Clear Un-coated Lens



Anti-reflection Multi-layer Coating

Hydrophobic Coating

The hydrophobic coating is the last layer in the coating package, it provides the lens with an extremely smooth surface. This makes the lens extremely repellent to dirt, water and can be easily cleaned.