Non-Glare Coatings For Polymers

Non-glare (or anti-glare) surface treatments for reflection control

Fine Mat Coating

When significant reduction of disturbing reflections with no loss or distortion of light is your priority, Fine Mat is the optimal solution.

Properties of Fine Mat

Fine Mat is especially developed to produce a mat, exclusive looking surface for elimination of reflections and perfect optical performance. The gloss level can be adjusted to fit the specific requirements of the application.

The coating process creates a unique surface structure consisting of lens-shaped micro-particles. These micro-particles block most of the ambient light from reaching the display without influencing the signal transmitted from the display. Hence the disturbing reflections are reduced with no loss of display readability.

When two plane surfaces are placed against each other, an undesirable phenomenon (Newton rings) can occur. However, Fine Mat acts as a spacer, creating sufficient distance between the surfaces to prevent this occurrence.

Fine Mat can be applied to extruded, cast, injection-moulded, and laminated plastic materials. The only requirement is that the sheet has not already been surface treated.

Further refinement

The application of Fine Mat surface treatment does not affect the potential for later silk screen printing, thermoforming, cold bending or other forms of processing.
Hard Mat Coating

Whenever there is a need to have a maximum of abrasion and chemical resistance combined with non-glare surface treatment Hard Mat is the right choice. Hard Mat enhances the surface of acrylic and polycarbonate to provide effective abrasion and chemical resistance.

Properties of Hard Mat

Hard Mat is designed for applications where abrasion resistance and non-glare properties are important – with abrasion resistance as first priority. For instance in industrial equipment in which cleaning agents and organic solvents are frequently used.

The Hard Mat coating adds a layer of lacquer containing almost invisible particles, which are referred to as a matting agent. The varnish is clear and the amount of particles is a dominant factor of how non-glare the surface treatment becomes.

The Hard Mat surface treatment is a UV-cured, non-glare hard coating characterised by extremely good physical and chemical properties. PSC offers Hard Mat surface treatments, which are suitable for both interior and exterior use.

Further refinement

The application of the Hard Mat surface treatment does not affect the possibility for later cutting and milling. However, later thermoforming and cold bending as well as gluing and silk screen printing on the coated side are not possible.
**Fine Hard Mat Coating**

Fine Hard Mat is the preferred choice when both excellent non-glare performance and abrasion resistance are important issues.

**Properties of Fine Hard Mat Coating**

Fine Hard Mat is our 'hybrid' non-glare coating which has inherited properties from both Hard Mat and Fine Mat. The surface treatment has been especially developed to combine optical performance with improved scratch and abrasion resistance, and as the name indicates - the coating is both fine mat and hard.

**Further Refinement**

Fine Hard Mat can be applied to clear acrylic and clear Polycarbonate materials only. Fine Hard Mat surfaces can be silk screen printed using same process and technique as for printing on glass surfaces.